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### **TABLE OF CONTENTS**

ENGLISH PROCEEDINGS
EFFECTS OF ACCESS TO MICROCREDIT ON THE GROWTH OF WOMEN-OWNED SMALL AND MEDIUM ENTERPRISES IN THE CENTRAL BUSINESS DISTRICT OF KISUMU: THE CASE OF KENYA WOMEN FINANCE TRUST2
Clemencia Osa Ouma, University of Nairobi, Kenya Charles M. Rambo, University of Nairobi, Kenya
ROLE OF CORPORATE GOVERNANCE IN THE FAMILY BUSINESS
GRAZIELLA SICOLI, UNIVERSITY OF CALABRIA, ITALY
CREATIVE INDUSTRY: AN OVERVIEW OF THE STATE OF MICHOACÁN, MÉXICO
Rubén Molina Martínez, Universidad Michoacana de San Nicolás de Hidalgo. M. A. Lexlie Ireri Rangel Vázquez, Universidad Michoacana de San Nicolás de Hidalgo
MERCANTILISM, GLOBALIZATION, UNETHICAL PRACTICES, CORRUPTION: A CASE STUDY OF THE RELATIONSHIP BETWEEN THE ENGLISH EAST INDIA COMPANY AND THE MONARCHY IN THE CONTEXT OF COLLABORATIONS IN THE SLAVE TRADE AND OTHER COMMERCIAL ACTIVITIES IN THE SEVENTEENTH CENTURY
Alan Parkinson, University College London Lynsie Chew, University College London
EFFECTS OF MONETARY POLICY RATE ON INTEREST RATES IN NIGERIA
IKECHUKWU KELILUME, LAGOS BUSINESS SCHOOL
GAAP VS. IFRS TREATMENT OF LEASES AND THE IMPACT ON FINANCIAL RATIOS
Peter Harris, New York Institute of Technology William Stahlin, Stevens Institute of Technology Liz Washington Arnold, The Citadel, The Military College of South Carolina Katherine Kinkela,New York Institute of Technology
EARLY AFTERMARKET DIVERGENCE OF OPINION AND MISPRICING OF FIXED PRICE IPOS ON BURSA MALAYSIA. 51
CHEEDRADEVI NARAYANASAMY, GRADUATE SCHOOL OF BUSINESS, NATIONAL UNIVERSITY OF MALAYSIA
ADDING MARKOWITZ AND SHARPE TO THE INVESTMENTS PROJECT
Lynda S. Livingston, University of Puget Sound
WHY THE LAST IN FIRST IN INVENTORY METHODS (LIFO) SHOULD BE SAVED?
Peter Harris, New York Institute of Technology Liz Washington Arnold, The Citadel William Stahlin, Stevens Institute of Technology
MODELING AND FORECASTING INFLATION WITH ARIMA AND VAR: THE CASE OF NIGERIA
Ikechukwu Kelilume, Lagos Business School Adedoyin Salami, Lagos Business School
THE DEFENSES OF THE LAST IN FIRST IN INVENTORY METHOD
Peter Harris, New York Institute of Technology Katherine Kinkela, New York Institute of Technology
RELATIONSHIP BETWEEN ENVIRONMENTAL REPORTING IN CORPORATE ANNUAL REPORTS & CORPORATE PROFITABILITY IN BANGLADESH

Anup Kumar Saha, Jagannath University, Bangladesh Shahnag Akter, Jagannath University, Bangladesh
THE CURRENT AND FUTURE STATES OF LIFO AND AVAILABLE TAX OPPORTUNITIES
Peter Harris, New York Institute of Technology William Stahlin, Stevens Institute of Technology Liz Washington Arnold, The Citadel
RECENT ADVANCES IN APPLICATIONS OF BUSINESS, FINANCIAL AND ECONOMIC PROBLEMS TO MATHEMATICAL PROGRAMMING90
Gavriel Yarmish, College City University of New York Harry Nagel, College of Business St. John's University Robert Fireworker, College of Business St. John's University
CHAIN COORDINATORS' LEADERSHIP STYLES AND COORDINATION EFFECTIVENESS: SELECTED AGRI-FOOD CHAINS OF UK IMPORTERS
Pervaiz Akhtar, Massey University Norman Marr, Massey University Elena Garnevska, Massey University
THE IMPLEMENTATION OF VALUE NETWORK SCORECARD: CASE CROSS-SECTOR COLLABORATION IN ELDERLY CARE
Daniela Grudinschi, Lappeenranta University of Technology, Finland Jukka Hallikas, Lappeenranta University of Technology, Finland Sanna Sintonen, Lappeenranta University of Technology, Finland Leena Kaljunen, SOCOM Oy, Expertise on Social Welfare, Finland
PATENTS AND TAXES DON'T MIX
Sara Linton, Roosevelt University
A COMPREHENSIVE CASE STUDY: US GAAP CONVERSION TO IFRS
Peter Harris, New York Institute of Technology William Stahlin, New York Institute of Technology Liz Washington Arnold, New York Institute of Technology Katherine Kinkela, New York Institute of Technology
AN EMPIRICAL ANALYSIS OF CORPORATE FINANCIAL CONDITION AFTER ACCOUNTING MALFEASANCE
Liz Washington Arnold, The Citadel Peter Harris, New York Institute of Technology
EARTH WALL CONSTRUCTION: THE WAY OUT FOR AFFORDABLLE AND SUSTAINABLE HOUSING DEVELOPMENT
амао Funmilayo, Ladoke Akintola University of Technology
LEADERSHIP IN CONTEXT: THE MODERATING EFFECT OF FOLLOWER NEED FOR AUTONOMY ON DIRECTIVE LEADERSHIP STYLE, EMPOWERING LEADERSHIP STYLE, AND LEADER EFFECTIVENESS IN VOLUNTEER ORGANIZATIONS
Stephen Kalaluhi, Regent University School of Business and Leadership
EFFECTS OF OWNERSHIP ON HOSPITAL PERFORMANCE IN CHINA
Zhonghua (Betty) Xu, Faculty of Business Administration University of Macau Jia Yuan, Faculty of Business Administration University of Macau

A DYNAMIC PANEL MODEL OF CAPITAL STRUCTURE AND AGENCY COST IN NIGERIAN LISTED COMPANIES 145
Dauda Mohammed, Bayero University
A PRINCIPLES-BASED CASE FOR TEACHING INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)
OBEUA PERSONS, RIDER UNIVERSITY
TIME DIMENSIONAL ANALYSIS OF PUBLIC- PRIVATE HOUSING FINANCE IN NIGERIA
Oluronke Omolola Odunjo, Department of Architecture, University Of Technology
CORPORATE PHILANTHROPIC DISASTER RESPONSE AND REGIONAL ECONOMIC DEVELOPMENT: EVIDENCE FROM CHINA
Xiaodong Qiu, Beijing Jiaotong University Ran Zhang, Peking University Jigao Zhu, University of International Business and Economics
LEGISLATION OF ETHICS IN THE EARLY YEARS OF THE SECURITIES AND EXCHANGE COMMISSION
DAN G. TEED, TROY UNIVERSITY
IDENTITY AND STATE-BUILDING: INSIGHTS FROM POST-COMMUNIST EASTERN EUROPE FOR POST-PARTITION KOREA
BENEDICT E. DEDOMINICIS, THE CATHOLIC UNIVERSITY OF KOREA
DEVELOPING BUSINESS COMPETENCES THROUGH THE USE OF A LANGUAGE PORTFOLIO
Rubén Molina Martínez, Universidad Michoacana de San Nicolás de Hidalgo Argelia Calderón Gutiérrez, Universidad Michoacana de San Nicolás de Hidalgo
ORGANIZATION DESIGN AND PERFORMANCE: A STUDY OF SELECTED INDIAN ORGANIZATIONS IN THE
LIBERALIZED ECONOMY
LIBERALIZED ECONOMY
LIBERALIZED ECONOMY       201         ARABINDA BHATTACHARYA, DEPARTMENT OF BUSINESS MANAGEMENT, UNIVERSITY OF CALCUTTA       AMIT KUNDU, SCHOOL OF MANAGEMENT STUDIES, TECHNO INDIA         CORPORATE CHIT FUND: AN ALTERNATIVE SHORT TERM FUNDING SOURCE FOR MICRO, SMALL AND MEDIUM
LIBERALIZED ECONOMY
LIBERALIZED ECONOMY       201         ARABINDA BHATTACHARYA, DEPARTMENT OF BUSINESS MANAGEMENT, UNIVERSITY OF CALCUTTA         AMIT KUNDU, SCHOOL OF MANAGEMENT STUDIES, TECHNO INDIA         CORPORATE CHIT FUND: AN ALTERNATIVE SHORT TERM FUNDING SOURCE FOR MICRO, SMALL AND MEDIUM         ENTERPRISES (MSMES)         S S N RAJU INDUKOORI, IMT NAGPUR
LIBERALIZED ECONOMY
LIBERALIZED ECONOMY       201         ARABINDA BHATTACHARYA, DEPARTMENT OF BUSINESS MANAGEMENT, UNIVERSITY OF CALCUTTA         AMIT KUNDU, SCHOOL OF MANAGEMENT STUDIES, TECHNO INDIA         CORPORATE CHIT FUND: AN ALTERNATIVE SHORT TERM FUNDING SOURCE FOR MICRO, SMALL AND MEDIUM         ENTERPRISES (MSMES)         S S N RAJU INDUKOORI, IMT NAGPUR         XP PROJECT PERFORMANCE MANAGEENT VIA STATISTICAL EVA         WEI LU, DUKE UNIVERSITY         LI LU, UNIVERSITY OF ELECTRONIC SCIENCE AND TECHNOLOGY OF CHINA
LIBERALIZED ECONOMY       201         ARABINDA BHATTACHARYA, DEPARTMENT OF BUSINESS MANAGEMENT, UNIVERSITY OF CALCUTTA       AMIT KUNDU, SCHOOL OF MANAGEMENT STUDIES, TECHNO INDIA         CORPORATE CHIT FUND: AN ALTERNATIVE SHORT TERM FUNDING SOURCE FOR MICRO, SMALL AND MEDIUM       210         S S N RAJU INDUKOORI, IMT NAGPUR       218         WEI LU, DUKE UNIVERSITY       218         WEI LU, DUKE UNIVERSITY       218         DESIGN OF A LOGISTICS MANAGEMENT MODEL FOR SMES OF TEXTILE MANUFACTURE.       223         PATRICIA CANO-OLIVOS, UPAEP         FERNANDO ORUE-CARRASCO, UPAEP         JOSÉ LUIS MARTINEZ-FLORES, UPAEP
LIBERALIZED ECONOMY       201         ARABINDA BHATTACHARYA, DEPARTMENT OF BUSINESS MANAGEMENT, UNIVERSITY OF CALCUTTA       201         AMIT KUNDU, SCHOOL OF MANAGEMENT STUDIES, TECHNO INDIA       202         CORPORATE CHIT FUND: AN ALTERNATIVE SHORT TERM FUNDING SOURCE FOR MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES)       210         S S N RAJU INDUKOORI, IMT NAGPUR       218         WEI LU, DUKE UNIVERSITY       218         WEI LU, DUKE UNIVERSITY       218         DESIGN OF A LOGISTICS MANAGEMENT MODEL FOR SMES OF TEXTILE MANUFACTURE       223         PATRICIA CANO-OLIVOS, UPAEP         FERNANDO ORUE-CARRASCO, UPAEP         JOSÉ LUIS MARTINEZ-FLORES, UPAEP         YÉSICA MAYETT-MORENO, UPAEP
LIBERALIZED ECONOMY       201         ARABINDA BHATTACHARYA, DEPARTMENT OF BUSINESS MANAGEMENT, UNIVERSITY OF CALCUTTA       AMIT KUNDU, SCHOOL OF MANAGEMENT STUDIES, TECHNO INDIA         CORPORATE CHIT FUND: AN ALTERNATIVE SHORT TERM FUNDING SOURCE FOR MICRO, SMALL AND MEDIUM       ENTERPRISES (MSMES)       210         S S N RAJU INDUKOORI, IMT NAGPUR       218       218         WEI LU, DUKE UNIVERSITY       LI LU, UNIVERSITY OF ELECTRONIC SCIENCE AND TECHNOLOGY OF CHINA       218         DESIGN OF A LOGISTICS MANAGEMENT MODEL FOR SMES OF TEXTILE MANUFACTURE       223         PATRICIA CANO-OLIVOS, UPAEP       FERNANDO ORUE-CARRASCO, UPAEP       JOSÉ LUIS MARTINEZ-FLORES, UPAEP         YÉSICA MAYETT-MORENO, UPAEP       MAYETT-MORENO, UPAEP       YÉSICA MAYETT-MORENO, UPAEP         MANAGEMENT ACCOUNTING PRACTICES (MAPS) IN ROMANIA SMALL BUSINESS       229

#### INNOVATION OF ROMANIAN SMES - A DEVELOPING STRATEGY OF THE ECONOMICAL ACTIVITY PERSPECTIVE 242

Ionica Oncioiu, Dimitrie Cantemir Christian University, Romania Dan Balamaci, Free International University of Moldova	
APPLYING COMMON SENSE LEADERSHIP: EVIDENCE FROM SENIOR LEADERS	
Jon K. Webber, University of Phoenix Gregory W. Goussak, Ashford University Elliot M. Ser, Florida Atlantic University	
CAP AND TRADE POLICIES FOR AIR QUALITY: A COMPUTER-ASSISTED SMART MARKET WITH A SAFETY	
Keith Willett, Oklahoma State University Anetta Caplanova, University of Economics in Bratislava Rudolf Sivak, University of Economics in Bratislava	
ANTHROPOMETRY IMPACT IN THE DESIGN OF MILITARY EQUIPMENT	
Mihai Opincă, Academy Of Economics Studies Bucharest Adrian Antip, Romanian Ministry Of Defence Alecxandrina Deaconu, Academy Of Economics Studies Bucharest	
DOES GENDER PLAY ROLE IN DECISION MAKING ON REGULATED MARKET?	
JANA PELIOVA, UNIVERSITY OF ECONOMICS IN BRATISLAVA	
FACTORS INFLUENCING THE DURATION TAKEN BY SMALL AND MEDIUM ENTERPRISES TO ACHIEVE EVEN POINT IN THEIR OPERATIONS: EVIDENCE FROM URBAN SLUM SETTLEMENTS OF NAIROBI, KEN	
CHARLES M. RAMBO, UNIVERSITY OF NAIROBI, KENYA	
THE EFFECT OF CORRUPTION ON FDI INFLOW: EMPIRICAL EVIDENCE FROM ASIAN ECONOMIES	
Aye Mengistu Alemu, SolBridge International School of Business	
HERD BEHAVIOR IN SAUDI ARABIAN STOCK MARKET: EVIDENCE FROM BOTH LINEAR AND NON-LIN	
M. Arifur Rahman, University of Brunei Darussalam Shah Saeed Hassan Chowdhury, Prince Mohammad Bin Fahd University M. Shibley Sadique, University of Rajshahi	
EXECUTIVE COMPENSATION AND EARNINGS MANAGEMENT: EMPIRICAL STUDY IN CHINA'S LISTED	
Jie Zhou, Xi'an Jiaotong Liverpool University Ling Yan ZUO, Xi'an Jiaotong Liverpool University	
A STUDY OF SUSTAINABLE BEHAVIORS AMONG CALIFORNIA HISPANICS REGARDING TRANSPORTAT	ION 312
Mary Beth McCabe, National University Ramon Corona, National University Richard Weaver, National University	
LEADERSHIP STYLES AND ORGANIZATIONAL EFFECTIVENESS IN SMALL CONSTRUCTION BUSINESSEMEXICO	-
Rafaela Martínez Méndez, Benemérita Universidad Autónoma de Puebla José Gerardo Serafín Vera Muñoz, Benemérita Universidad Autónoma de Puebla María Antonieta Monserrat Vera Muñoz, Benemérita Universidad Autónoma de Puebla	
UNDERSTANDING THE DYNAMIC OF THE ENTREPRENEURIAL PROCESS: THE INNOVATIVE ENTREP THE STRATEGIC DECISIONS	

Sonia De Coulon, Universidad Nacional de Mar del Plata Fabiola Baltar, Universidad Nacional de Mar del Plata
EQUITY ISSUES AND THE IMPACT OF LEAD MANAGER AFFILIATION ON BROKER MARKET SHARE AND TRADING VOLUME
Elvis Jarnecic, School of Business, University of Sydney Yubo Liu, School of Business, University of Sydney
ENHANCING CUSTOMER SATISFACTION BY INCREASING THE FREQUENCY OF USE OF AGRICULTURAL BUSINESS UNITS
Liezel Alsemgeest, University of the Free State, South Africa Van Aardt Smit, University of the Free State, South Africa
COMPARATIVE GEOSTRATEGIC STUDY OF MEXICO AND PANAMA FOR INSTALLATION OF AMERICA LOGISTIC PLATFORM
Adriana Rodríguez-Rojas, UPAEP Fernando Orue-Carrasco, UPAEP José Luis Martínez-Flores, UPAEP Yésica Mayett-Moreno, UPAEP
THE CONTRIBUTION OF HUMAN CAPITAL INVESTMENT IN ECONOMIC DEVELOPMENT
Paul Lucian, Lucian Blaga University of Sibiu , Romania
THE STUDY OF EARNINGS MANAGEMENT AND DIVIDEND THRESHOLD
LI-HUA LIN, TRANSWORLD UNIVERSITY Szu-Hsien Lin, Transworld University
THE PRICE-VOLUME RELATIONSHIP OF FIRM SIZE INDICES: EVIDENCE FROM TAIWAN STOCK MARKET
Hsien-Bin Wang, TransWorld University Jen-Tseng Chen, TransWorld University Shih-Yung Wei, Oriental Institute of Technology Szu-Hsien Lin, Transworld University
AN ESTIMATION OF ECUADOR'S EXPORT DEMAND FUNCTION ON TRADE WITH THE US: 1965-2011
Ranjini L Thaver, Stetson University Christina Bova, Stetson University
EMOTIONAL INTELLIGENCE OF FINANCIAL PLANNERS IN MEDIATION
Randy Braidfoot, Ashford University Andree C. Swanson, Ashford University
ACCOUNTING AND FINANCIAL REPORTING SYSTEM REFORMATION IN BELARUS
TATSIANA RYBAK, MINISTRY OF FINANCE OF THE REPUBLIC OF BELARUS
USING OPTION-IMPLIED VOLATILITY TO PREDICT EARNINGS SURPRISES IN THE STOCKS OF THE DOW JONES INDUSTRIAL AVERAGE
Stephen C. Henry, SUNY Plattsburgh
A NEW KIND OF SOCIAL ENTREPRENEURSHIP! MAM CASE STUDY
ELIZABETH ROBLES, UNIVERSITY OF PUERTO RICO
RISK ASSESSMENT AND CORPORATE GOVERNANCE
Peter Harris, New York Institute of Technology

Katherine Kinkela, New York Institute of Technology Steven Shapiro, New York Institute of Technology
MCDONALDIZATION FROM WEBER'S POINT OF VIEW AND ITS REFLECTIONS IN TURKISH SOCIETY
Elif Kiran, Fatih University
THE IMPACTS OF SINAPI ABA TRUST, A MICROFINANCE LENDING SCHEME ON ITS CLIENTS IN GHANA
Paul A Onyina, Pentecost University College, Accra Sean Turnell, Macquarie University, Sydney
EFFECTS OF DEBT FORGIVENESS TOWARDS ECONOMIC EQUILIBRIUM: SOLUTIONS TO CRISES
Abdulla Galadari, Massachusetts Institute of Technology / Masdar Instititute
THE RELATIONSHIP OF BRAND ASSOCIATION AND LOYALTY: AN EMPIRICAL STUDY FOR RETAIL BANKING IN INDIA
Dhananjay Bapat, National Institute of Bank Management, Pune, India,
HOW DOES FOREIGN DIRECT INVESTMENT AFFECT ECONOMIC GROWTH OF ARAB COUNTRIES?
Nasser Elkanj, The American University of the Middle East Chadi Yaacoub, The American University of the Middle East Mohamad Tararbay, The American University of the Middle East
NON-FINANCIAL CORPORATE DEBT
Vratislav Izak, University of Economics, Prague
CHANGING ROLES OF ACCOUNTANTS
TATIANA ANTIPOVA, INSTITUTE OF CERTIFIED SPECIALISTS, RUSSIA
PREDICTORS AND OUTCOMES OF SPORT EVENT EXPERIENTIAL VALUE (SEEV): INSIGHTS FROM FORMULA 1 PETRONAS MALAYSIAN GRAND PRIX
Rosidah Musa, Faculty of Business Management, Universiti Teknologi MARA, Malaysia Rezian-na Muhammad Kassim, Universiti Teknologi MARA, Malaysia Lennora Putit, Faculty of Business Management, Universiti Teknologi MARA, Malaysia Zamani Ismail, Universiti Teknologi MARA, Malaysia
COMPARISONS OF SOFT DEBT FINANCING PROBLEMS IN CHINA ANC KOREA
Sunghwan Kim, Kyungpook National University Jin Tan, Kyungpook National University Yurim Lee, Kyungpook National University
THE APPLICATION OF WTP AND WTA IN SUPPORTING PUBLIC SCHOOLS
Mingsiang Chen, Tamkang University
ASSESSING FACTORS DRIVING INTERNET USAGE AMONG SMES IN GHANA; A CASE STUDY OF SMES IN KUMASI
Kwabena Obiri-Yeboah, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana Eliezer Ofori Odei-Lartey, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana
COLLABORATIVE EDUCATION: NEW FRONTIER FOR FUTURE EDUCATION AND YUNUS SOCIAL BUSINESS
UNDERSTANDING THE B-SHARE DISCOUNTS: EXCHANGE RISK IN CHINESE STOCK MARKET
Mo Zhang, Hanken School of Economics
THE BETA-INDEX AND BETA-MOBILITY IDEA AND EMPIRICS

Nasser Elkanj, The American University of the Middle East Mohamad Tarabay, The American University of the Middle East Chadi Yaacoub, The American University of the Middle East
ACCOUNTING AND FINANCIAL REPORTING SYSTEM REFORMATION IN BELARUS
TATSIANA RYBAK, MINISTRY OF FINANCE OF THE REPUBLIC OF BELARUS
THE OPTIMAL DIVIDEND YIELD RANGE: THE CASE OF EUROPE AND SPAIN DURING THE PERIOD 2000-2009 496
M. Teresa Corzo Santamaría, Universidad Pontificia de Comillas Mª Dolores Lagoa Varela, Universidade da Coruña
TOURIST PERCEPTIONS REGARDING SERVICE AT RECREATIONAL PARKS IN THE STATE OF QUINTANA ROO 504
AUDITOR'S CLIENT ACCEPTANCE AND CONTINUANCE DECISIONS: A RESEARCH NOTE
Mohamed Drira, University of New Brunswick
SEDNA BOATS: A SEARCH FOR UNRECORDED LIABILITIES AUDIT SIMULATION
Mohamed Drira, University of New Brunswick Nicolas Martot, Ernest & Young
THE FINANCIAL IMPACT OF MARKETING AND R&D INTEGRATION: EVIDENCE FROM KOREA
Sohyoun Shin, Eastern Washington University
THE OPTIMAL DIVIDEND YIELD RANGE: THE CASE OF EUROPE AND SPAIN DURING THE PERIOD 2000-2009 522
M. Teresa Corzo Santamaría, Universidad Pontificia de Comillas Mª Dolores Lagoa Varela, Universidade da Coruña
SPANISH PROCEEDINGS
VARIABLES QUE INFLUIRÍAN EN LA GESTIÓN ORIENTADA AL VALOR DEL CLIENTE Y EL DESEMPEÑO ORGANIZACIONAL
VARIABLES QUE INFLUIRÍAN EN LA GESTIÓN ORIENTADA AL VALOR DEL CLIENTE Y EL DESEMPEÑO
VARIABLES QUE INFLUIRÍAN EN LA GESTIÓN ORIENTADA AL VALOR DEL CLIENTE Y EL DESEMPEÑO ORGANIZACIONAL
VARIABLES QUE INFLUIRÍAN EN LA GESTIÓN ORIENTADA AL VALOR DEL CLIENTE Y EL DESEMPEÑO ORGANIZACIONAL
VARIABLES QUE INFLUIRÍAN EN LA GESTIÓN ORIENTADA AL VALOR DEL CLIENTE Y EL DESEMPEÑO ORGANIZACIONAL
VARIABLES QUE INFLUIRÍAN EN LA GESTIÓN ORIENTADA AL VALOR DEL CLIENTE Y EL DESEMPEÑO ORGANIZACIONAL
VARIABLES QUE INFLUIRÍAN EN LA GESTIÓN ORIENTADA AL VALOR DEL CLIENTE Y EL DESEMPEÑO ORGANIZACIONAL
VARIABLES QUE INFLUIRÍAN EN LA GESTIÓN ORIENTADA AL VALOR DEL CLIENTE Y EL DESEMPEÑO ORGANIZACIONAL       532         LESLIER VALENZUELA, UNIVERSIDAD DE CHILE       532         IDERAZGO Y CAPITAL SOCIAL, EJES PARA CONSOLIDAR UN CLÚSTER: SC MUEBLES EN JALISCO, MÉXICO       544         BERTA ERMILA MADRIGAL TORRES, UNIVERSIDAD DE GUADALAJARA CUCEA       544         KATIA LOZANO UVARIO, UNIVERSIDAD DE GUADALAJARA CUCSH       532         RICARDO ARECHAVALA VARGAS, UNIVERSIDAD DE GUADALAJARA CUCEA       556         MATACHA GENTILE, UNIVERSIDAD NACIONAL DE MAR DEL PLATA       556
VARIABLES QUE INFLUIRÍAN EN LA GESTIÓN ORIENTADA AL VALOR DEL CLIENTE Y EL DESEMPEÑO ORGANIZACIONAL

EL COMERCIO INTRAINDUSTRIAL EN LA RELACIÓN MÉXICO-CANADÁ
Francisco Isaías Ruiz Ceseña, Universidad Autónoma de Baja California Sur Judith Juárez Mancilla, Universidad Autónoma de Baja California Sur Plácido Roberto Cruz Chávez, Universidad Autónoma de Baja California Sur Mauro A. Monroy Ceseña, Universidad Autónoma de Baja California Sur
ANÁLISIS DE LA GESTIÓN DE LOS RECURSOS HUMANOS QUE APLICAN LAS PEQUEÑAS Y MEDIANAS EMPRESAS DE SERVICIO
Héctor Priego Huertas, Universidad de Colima, México Roberto Espíritu Olmos, Universidad de Colima, México Lorena Hernández Ruíz, Universidad de Colima Albania Padilla Martínez, Universidad de Colima
JUZGADOS ADMINISTRATIVOS MUNICIPALES EN EL ESTADO DE TAMAULIPAS
Luis Moral Padilla, Universidad Autónoma de Tamaulipas Jesús Apolinar Martínez Puebla, Universidad Autónoma de Tamaulipas Salomón Elizalde Ceballos, Universidad Autónoma de Tamaulipas
REFORMA LABORAL: TENDENCIA DE LA PREVISIÓN SOCIAL PARA LAS NUEVAS GENERACIONES
Esthela Carrillo Cisneros, Universidad Estatal de Sonora Elia del Carmen Moreno Ibarra, Universidad Estatal de Sonora Oscar Acosta de los Santos, Universidad Estatal de Sonora Ma Guadalupe Bustamante Ruiz, Universidad Estatal de Sonora Rosalía Altagracia Almada Urías, Universidad Estatal de Sonora
EXPERIENCIA MEMORABLE DE COMPRA EN TIENDAS MUEBLERAS DE LA FRONTERA TIJUANA, B.C. – SAN DIEGO, CA
Lucila Villa Pérez, Universidad Tecnológica de Tijuana Santiago González Velásquez, Universidad Tecnológica de Tijuana Marcela Patricia Ahumada Toscano, Universidad Tecnológica de Tijuana
LA GESTIÓN DEL CONOCIMIENTO COMO ELEMENTO DE COMPETITIVIDAD EN LA INDUSTRIA MANUFACTURERA EN AGUASCALIENTES
Luis Aguilera Enríquez, Universidad Autónoma de Aguascalientes, Cristyan Ahmed de Guadalupe Sandoval Robles, Universidad Antonio de Nebrija José de Jesús Torres Ramírez, Universidad Antonio de Nebrija R. Rodrigo Rodríguez Camacho, Universidad Autónoma de Aguascalientes
LA ARMONIZACIÓN CONTABLE HACIA LA TRANSPARENCIA Y RENDICIÓN DE CUENTAS EN MÉXICO659
Esther Eduviges Corral Quintero, Universidad Autónoma de Baja California Loreto María Bravo Zanoguera, Universidad Autónoma de Baja California Plácido Valenciana Moreno, Universidad Autónoma de Baja California Sósima Carrillo, Universidad Autónoma de Baja California
ESTRATEGIA DE LOS SECTORES EDUCATIVO, EMPRESARIAL Y GUBERNAMENTAL, PARA LA GENERACION Y CONSOLIDACION DE PEQUEÑAS Y MEDIANAS EMPRESAS EN EL MUNICIPIO DE AGUA PRIETA, SONORA MEXICO 
Blanca Esthela Zazueta Villavicencio, Instituto Tecnológico de Agua Prieta Juán Antonio Parra Valenzuela, Instituto Tecnológico de Agua Prieta Eduardo Rodríguez Leyva, Instituto Tecnológico de Agua Prieta Víctor Manuel Valenzuela Alcaraz, Instituto Tecnológico de Agua Prieta

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Sósima Carrillo, Universidad Autónoma de Baja California Loreto María Bravo Zanoguera, Universidad Autónoma de Baja California Ana Cecilia Bustamante Valenzuela, Universidad Autónoma de Baja California Adelaida Figueroa Villanueva, Universidad Autónoma de Baja California
APLICACIÓN DEL DIAMANTE DE COMPETITIVIDAD DE PORTER EN LA INDUSTRIA DE CARNE DE CERDO EN EL ESTADO DE SONORA
María Teresa González Barajas, Universidad Estatal de Sonora Antonio Emmanuel Pérez Brito, Universidad Autónoma de Yucatán Luis Antonio Zaragoza Joya, Universidad Tecnológica de Cancún Gustavo César Hermosillo Anduaga, Universidad Estatal de Sonora
UN ANÁLISIS ECONÓMICO DEL TURISMO Y SUS IMPACTOS EN LOS SERVICIOS DE LOS ECOSISTEMAS COSTEROS EN BAJA CALIFORNIA SUR
José Urciaga García, Universidad Autónoma de Baja California Sur Judith Juárez Mancilla, Universidad Autónoma de Baja California Sur Plácido Roberto Cruz Chávez, Universidad Autónoma de Baja California Sur Claudia Lauterio Martínez, Universidad Autónoma de Baja California Sur
INTERACCIÓN EN EL SISTEMA REGIONAL DE INNOVACIÓN: ESTUDIO EMPÍRICO DE LA COLABORACIÓN Y COOPERACIÓN PARA LA INNOVACIÓN EN EL CONTEXTO DE REGIÓN LAGUNERA DE COAHUILA
María del Carmen Armenteros Acosta, Universidad Autónoma De Coahuila Manuel Medina Elizondo, Universidad Autónoma De Coahuila Víctor Manuel Molina Morejón, Universidad Autónoma De Coahuila Gabriela Reyna García,Universidad Autónoma De Coahuila
PERSPECTIVAS DEL TURISMO: CASO MÉXICO
Plácido Roberto Cruz Chávez, Universidad Autónoma de Baja California Sur Judith Juárez Mancilla, Universidad Autónoma de Baja California Sur José Urciaga García, Universidad Autónoma de Baja California Sur Francisco Isaías Ruiz Ceseña, Universidad Autónoma de Baja California Sur
LA REFORMA LABORAL EN MÉXICO
GILBERTO ENRIQUE BUSTAMANTE VALENZUELA, UNIVERSIDAD AUTÓNOMA DE BAJA CALIFORNIA
ELEMENTOS DE UN MODELO DE ADMINISTRACIÓN FINANCIERA PARA LAS PEQUEÑAS EMPRESAS COMERCIALES 
Sósima Carrillo, Universidad Autónoma de Baja California Loreto María Bravo Zanoguera, Universidad Autónoma de Baja California Plácido Valenciana Moreno, Universidad Autónoma de Baja California Esther Eduviges Corral Quintero, Universidad Autónoma de Baja California
ANÁLISIS ESTRATÉGICO PARA EL DESARROLLO DE LAS MICRO, PEQUEÑAS Y MEDIANAS EMPRESAS (MPYMES): ESTUDIO EMPÍRICO EN TORREÓN, COAHUILA, MÉXICO742
Manuel Medina Elizondo, Universidad Autónoma de Coahuila Sandra López Chavarría, Universidad Autónoma de Coahuila Liliana Angélica Guerrero Ramos, Universidad Autónoma de Coahuila Francisco Canibe Cruz, Universidad Autónoma de Coahuila Martín Jaramillo Rosales, Universidad Autónoma de Coahuila
LA CALIDAD Y LA EVALUACIÓN COMO ESTRATEGIA DE MEJORA Y CAMBIO EN LA SOCIEDAD DEL CONOCIMIENTO: ANÁLISIS DE CASOS EN INSTITUCIONES DE EDUCACIÓN SUPERIOR EN EUROPA, AMÉRICA DEL

Maritza Rengifo Millán, Université De Montréal
TENDENCIAS DEL SECTOR HOTELERO INTERNACIONAL753
María Soledad Ramírez Flores, Universidad Michoacana de San Nicolás de Hidalgo Fabricio Guzmán Bedolla, Universidad Michoacana de San Nicolás de Hidalgo
MUJERES EMPRENDEDORAS: SIMILITUDES Y DIFERENCIAS ENTRE LAS CIUDADES DE TORREÓN Y SALTILLO, COAHUILA
Liliana Angélica Guerrero Ramos, Universidad Autónoma de Coahuila Elizabeth Lourdes Gómez Gutiérrez, Universidad Autónoma de Coahuila María del Carmen Armenteros Acosta, Universidad Autónoma de Coahuila
LA ORIENTACIÓN AL MERCADO APLICADA EN EMPRESAS COMERCIALES DEL VALLE DE SAN QUINTÍN. B.C 768
Fanny Yumayra Reyes Aceves, UABC-FINSQ Lizzette Velasco Aulcy, UABC-FINSQ Luis Alberto Morales Zamorano, UABC-FINSQ
IMPACTO DE LA DIVULGACIÓN DE INFORMACIÓN FINANCIERA EN INTERNET DE LAS EMPRESAS EN AMÉRICA LATINA
Marcela de Guadalupe Pelayo Velázquez, Universidad de Guadalajara Yolanda Fuentes Callén, Universidad de Zaragoza Beatriz Cuéllar Fernández, Universidad de Zaragoza Myriam Arias Uribe, Universidad de Guadalajara
METODOLOGÍA PARA LA IMPLEMENTACIÓN DE LA NORMA OHSAS 18001 EN PYMES
Carlos Alberto González Camargo, Universidad Jorge Tadeo Lozano Germán Darío Perea Robayo, Unión Temporal Corporación Calidad - Universidad Jorge Tadeo Lozano
LA CALIDAD DEL SERVICIO EN CAFETERIA, SEGÚN PERCEPCION DE USUARIOS
Isela Romero Castillo, Universidad Autónoma de Baja California Virginia Guadalupe López Torres, Universidad Autónoma de Baja California
EL CAMINO HACIA LA CERTIFICACIÓN DE LA CALIDAD DE LOS PROGRAMAS EDUCATIVOS EN LA EDUCACIÓN SUPERIOR EN MÉXICO: UNA EXPERIENCIA DEL POSGRADO EN DERECHO EN LA UNIVERSIDAD AUTÓNOMA DEL ESTADO DE MORELOS
Eduardo Oliva Gómez, Universidad Autónoma del Estado de Morelos
EVALUACIÓN DE LA COMPETITIVIDAD DE LOS RESTAURANTES DE COCINA INTERNACIONAL
María Magdalena García Ramírez, Universidad Autónoma de Baja California Virginia Guadalupe López Torres, Universidad Autónoma de Baja California
LA GESTIÓN FINANCIERA COMO FACTOR DE COMPETITIVIDAD PARA LAS PYMES FAMILIARES EN LA INDUSTRIA TEXTIL EN YUCATÁN, MÉXICO
Martha Isabel Bojórquez Zapata, Universidad Autónoma de Yucatán Antonio Emmanuel Pérez Brito, Universidad Autónoma de Yucatán María Teresa González Barajas, Centro de Educación Superior del Estado de Sonora
ANÁLISIS DE LA VARIACIÓN NATURAL DE LOS INDICADORES DE RENTABILIDAD EN LAS EMPRESAS DEL SECTOR CARBÓN EN COLOMBIA
Tomás José Fontalvo Herrera, Universidad de Cartagena

JOSÉ MORELOS GÓMEZ, UNIVERSIDAD DE CARTAGENA

JUAN CARLOS VERGARA SCHMALBACH, UNIVERSIDAD DE CARTAGENA

ANÁLISIS CUANTITATIVO DE PATENTES EN MÉXICO
José Pablo Alcázar-Zamacona, Universidad Popular Autónoma del Estado de Puebla Karla Liliana Haro-Zea, Universidad Popular Autónoma del Estado de Puebla
IMPLEMENTACION DE UN PROCESO DE DESARROLLO ORGANIZACIONAL EN UNA MICROEMPRESA838
Laura Elena Woolfolk Gallego, Universidad Estatal de Sonora Denisse Gómez Bañuelos, Universidad Estatal de Sonora Adrialy Perez Gaxiola, Universidad Estatal de Sonora
EL TURISMO EN SUSTICACAN, ZACATECAS
Ana Karen Fraire Ortiz, Universidad de Guadalajara Reyna Beatriz Arreola Rodarte, Universidad de Guadalajara Rosa Nelly Fraire Zamarripa, Instituto Tecnológico Superior Zacatecas Norte Karen Yuridia Estupiñan Pérez, Instituto Tecnológico Superior Zacatecas Norte
RELACIÓN DE CAUSALIDAD ENTRE EL ÍNDICE DE PRECIOS DEL PRODUCTOR Y EL ÍNDICE DE PRECIOS DEL CONSUMIDOR INCORPORANDO CAMBIOS ESTRUCTURALES: EL CASO DE LOS PAÍSES MIEMBROS DEL TLCAN 848
Mario Gómez Aguirre, Universidad Michoacana de San Nicolás de Hidalgo José Carlos Rodríguez, Universidad Michoacana de San Nicolás de Hidalgo
ANALISIS DEL OUTSOURCING EN MEXICO
Lorena Alvarez Flores, UABC Lizzette Velasco Aulcy, UABC Rafael Espinoza Torres, UABC Seidi Iliana Pérez Chavira, UABC
PROPUESTA ECOPEDAGOGICA PARA UN DESARROLLO SOSTENIBLE: ITINERARIO ECOTURISTICO, HISTORICO Y CULTURAL EN LA SIERRA DE ZONGOLICA, VERACRUZ MEXICO
Leonel Lara Serna, Universidad Veracruzana Mónica Karina González Rosas, Universidad Veracruzana Verónica Guadalupe Escamilla Centeno, Universidad Veracruzana Julio Alonso Iglesias, Universidad Veracruzana
EL MARKETING NOSTÁLGICO Y SU RELACIÓN CON EL CONSUMO DE PRODUCTOS DE MAÍZ EN LOS MIGRANTES MEXICANOS
Ramón Sebastián Acle Mena, Benemérita Universidad Autónoma de Puebla Mario Antonio Burguete García, Universidad Tecnológica de Oriental
EL PAPEL DEL CAPITAL HUMANO EN LA GENERACIÓN DE VALOR EMPRESARIAL: VARIABLES DETERMINANTES 880
Juan Carlos Zapata Valencia, Universidad Pontificia Bolivariana Santiago Gutiérrez Broncano, Universidad de Castilla la Mancha Mercedes Rubio Andres, Universidad San pablo CEU
FACTORES FINANCIEROS Y NO FINANCIEROS COMO DETERMINANTES DE LAS DECISIONES DE INVERSION 886
Mario Rene Chan Magaña, Universidad Tecnológica Regional del Sur
BIOETICA: UNA ORIENTACION HACIA LA RESPONSABILIDAD SOCIAL EMPRESARIAL DE LOS ESTUDIANTES LATINOAMERICANOS DE ESCUELAS DE NEGOCIOS
Mario René Chan Magaña, Universidad Tecnológica del Sur Nery del Socorro Escalante May, Universidad Autónoma de Yucatán
CULTURE PROSECUTOR IN MEXICO

Fidel Antonio Mendoza Shaw, Universidad Estatal De Sonora
IMPORTANCIA ESTRATÉGICA DEL CAPITAL INTELECTUAL EN LA INDUSTRIA MANUFACTURERA DE LA REGIÓN SURESTE DEL ESTADO DE COAHUILA, MÉXICO917
Yolanda Mejía de León, Universidad Autónoma de Coahuila María de la Luz Rodríguez Garza, Universidad Autónoma de Coahuila Alicia Hernández Bonilla, Universidad Autónoma de Coahuila
MODELACIÓN DE LA ESTRUCTURA AGROINDUSTRIAL DE PALMA DE ACEITE DEL DEPARTAMENTO DEL MAGDALENA, COLOMBIA
Jelibeth Paola Racedo Gutiérrez, Universidad del Magdaleana Delimiro Alberto Visbal Cadavid, Universidad del Magdaleana
LAS CAPACIDADES DE LA EMPRESA PARA PERSONALIZAR SU PRODUCCIÓN Y RECONFIGURARSE DE FORMA INTERNA: ¿INFLUENCIAN SU DESEMPEÑO OPERATIVO Y SU VENTAJA COMPETITIVA PERCIBIDOS?
Aurora Irma Máynez-Guaderrama, Universidad Autónoma de Ciudad Juárez Judith Cavazos-Arroyo, Universidad Popular Autónoma del Estado de Puebla Vianey Torres-Arguelles, Universidad Autónoma de Ciudad Juárez María Teresa Escobedo-Portillo, Universidad Autónoma de Ciudad Juárez
ANALISIS COMPARATIVO DE LA PRODUCTIVIDAD Y RENTABILIDAD DE LAS ZONAS INDUSTRIALES FRANCA Y MAMONAL, COMO RESULTADO DE LA CERTIFICACION ISO: 9001 EN COLOMBIA
José Morelos Gómez, Universidad de Cartagena Tomás José Fontalvo Herrera, Universidad de Cartagena Juan Carlos Vergara Schmalbach, Universidad de Cartagena
COMPETITIVIDAD DE LAS MICROEMPRESAS EN CUENCA ECUADOR944
Luis Tobar Pesántez, Universidad Politécnica Salesiana del Ecuador
EL CONSUMIDOR POSTMODERNO
Madeline Melchor Cardona, Universidad Autónoma de Occidente Carmen Elisa Lerma Cruz, Universidad Autónoma de Occidente
ANÁLISIS DE LOS RIESGOS EN LA TOMA DE DECISIONES DE LA ALTA DIRECCIÓN A TRAVÉS DE LA AUDITORÍA DE GESTIÓN
Patricia Gutiérrez Moreno, Universidad de Guadalajara Martin Miguel López García, Universidad de Guadalajara Mtro. Ramiro Torres Torre, Universidad de Guadalajara
LAS NUEVAS TECNOLOGIAS, SU IMPACTO LABORAL Y TRANSFORMACIÓN DEL QUEHACER ACADÉMICO Y ADMINISTRATIVO: CASO FACULTAD DE MEDICINA, CAMPUS CIUDAD MENDOZA, VERACRUZ MÉXICO
Gabriela Bernardo Huerta, Universidad Veracruzana Verónica Guadalupe Escamilla Centeno, Universidad Veracruzana Mónica Karina González Rosas, Universidad Veracruzana Adolfo Valdez Morales, Universidad Veracruzana
LA DECLARACIÓN PATRIMONIAL COMO HERRAMIENTA DE TRANSPARENCIA DEL FUNCIONARIO PÚBLICO 968
Ana Isabel Barocio Torres, Universidad De Guadalajara Norma Yareli San Juan Vera, Instituto Politécnico Nacional Sergio Sánchez Enríquez, Universidad De Guadalajara
RENDICIÓN DE CUENTAS EN LA INCAUTACIÓN DE BIENES EN MÉXICO976
Diego Soria Ortiz, Universidad Autónoma De Sinaloa

Mónica Marsela López García, Universidad De Guadalajara Rigoberto Reyes Altamirano, Universidad De Guadalajara

#### GESTIÓN DE CERTIFICACIÓN DE CALIDAD COMO FACTOR DE COMPETITIVIDAD EN EL SECTOR INDUSTRIAL DE MANUFACTURA, EN LA REGIÓN TRANSFRONTERIZA CD. JUÁREZ, CHIHUAHUA, MÉXICO-EL PASO, TEXAS, USA 986

FRANCISCO BRIBIESCAS SILVA, UNIVERSIDAD AUTÓNOMA DE CIUDAD JUÁREZ IGNACIO FRANCISCO ROMERO MAGAÑA, UNIVERSIDAD AUTÓNOMA DE CIUDAD JUÁREZ

#### ANÁLISIS DE LA CALIDAD DE LOS SERVICIOS RECIBIDOS EN LAS INSTITUCIONES DE EDUCACIÓN SUPERIOR...... 997

Sonia Elizabeth Maldonado-Radillo, Universidad Autónoma de Baja California Ana Ma. Guillén Jiménez, Universidad Autónoma de Baja California Rafael Ernesto Carranza Prieto, Universidad Autónoma de Baja California María Concepción Ramírez Barón, Universidad Autónoma de Baja California

#### 

BEATRIZ ELENA PÉREZ HOYOS, UNIVERSIDAD DEL MAGDALENA DELIMIRO ALBERTO VISBAL CADAVID, UNIVERSIDAD DEL MAGDALENA YASMIN ELENA CALABRIA MALAMUT, MINISTERIO DE EDUCACIÓN NACIONAL DE COLOMBIA ROLANDO ESCORCIA CABALLERO, UNIVERSIDAD DEL MAGDALENA

#### 

Alberto Cárdenas Valenzuela, Instituto Tecnológico de Ciudad Juárez Fátima Martínez Hernández Instituto Tecnológico de Ciudad Juárez Esther Enríquez Pérez Instituto Tecnológico de Ciudad Juárez Elvira Mora Luján, Instituto Tecnológico de Ciudad Juárez

#### 

Luis Aguilera Enríquez, Universidad Autónoma de Aguascalientes Martha González Adame, Universidad Autónoma de Aguascalientes Octavio Hernández Castorena, Universidad Autónoma de Aguascalientes

#### MEDICIÓN DEL CLIMA LABORAL EN UNA EMPRESA METAL MECÁNICA ...... 1023

Sandra Patricia de la Garza Cienfuegos, Universidad Autónoma de Coahuila Armandina Margarita Olloqui López, Universidad Autónoma de Coahuila Laura Leticia Gaona Tamez, Universidad Autónoma de Coahuila

#### EFICIENCIA DE LOS PROGRAMAS ACADÉMICOS DE UNA INSTITUCIÓN UNIVERSITARIA EN COLOMBIA ............ 1030

ROLANDO ESCORCIA CABALLERO, UNIVERSIDAD DEL MAGDALENA DELIMIRO ALBERTO VISBAL CADAVID, UNIVERSIDAD DEL MAGDALENA ANDRÉS MUNIVE HERNÁNDEZ, UNIVERSIDAD DEL MAGDALENA

#### LA GUELAGUETZA DE ACERVO BIBLIOGRÁFICO PARA MUNICIPIOS MARGINADOS EN EL ESTADO DE OAXACA 1031

ANA LUZ RAMOS SOTO, UNIVERSIDAD AUTÓNOMA "BENITO JUÁREZ" DE OAXACA

#### 

**RIGOBERTO REYES ALTAMIRANO** 

#### ELECCIÓN DE FUENTES DE FINANCIAMIENTO PARA UNA EMPRESA......1046

MA. CRISTINA SÁNCHEZ ROMERO, INSTITUTO TECNOLÓGICO DE ORIZABA

Alicia Águeda Conde Islas, Universidad Politécnica de Huatusco Fernando Aguirre y Hernández, Instituto Tecnológico de Orizaba Edna Araceli Romero Flores, Instituto Tecnológico de Orizaba
INNOVACIÓN DE LAS OPERACIONES LOGÍSTICAS EN LA EMPRESA REINDUSTRIAS
Diana Marcela Mosquera Cicero, Universidad Jorge Tadeo Lozano Carlos Alberto González Camargo, Universidad Jorge Tadeo Lozano
PLAN ESTRATÉGICO PARA UN CENTRO DE PRODUCCIÓN ACUA-AGRÍCOLA SUSTENTABLE EN LA REGIÓN DEL SUR DE SONORA
Lizeth Alejandra González Martínez, Universidad Estatal de Sonora Daniel Paredes Zempual, Universidad Estatal de Sonora Martin Mariscal Lagarda, Universidad Estatal de Sonora María Dolores Moreno Millanes, Instituto Tecnológico de Sonora Rodolfo Valenzuela Reynaga, Instituto Tecnológico de Sonora
METODOLOGÍA DE FLUJO DE CONOCIMIENTO APLICADA AL PROCESO DE ACREDITACIÓN DE PROGRAMAS EDUCATIVOS (SEGUNDA FASE)
Lorenia Cantú Ballesteros, Universidad Estatal de Sonora Oscar Mario Rodríguez Elías, Instituto Tecnológico de Hermosillo María Guadalupe Sánchez Cuéllar, Universidad Estatal de Sonora Claudia Rojas Vásquez, Universidad Estatal de Sonora Josefina Ortega Ruiz, Universidad Estatal de Sonora José Francisco Becerra Arenas, Universidad Estatal de Sonora Gustavo Alberto Sánchez Córdoba, Universidad Estatal de Sonora
INFLUENCIA DEL LIDERAZGO SOBRE EL CLIMA ORGANIZACIONAL EN PYMES; CASO CATERING GOURMET DE DURANGO, MÉXICO
DORANGO, MERICO
María Brenda González Herrera, Universidad Juárez del Estado de Durango Ernesto Geovani Figueroa González, Universidad Juárez del Estado de Durango Rosa Carmín González Peyro, Universidad Juárez del Estado de Durango
María Brenda González Herrera, Universidad Juárez del Estado de Durango Ernesto Geovani Figueroa González, Universidad Juárez del Estado de Durango
María Brenda González Herrera, Universidad Juárez del Estado de Durango Ernesto Geovani Figueroa González, Universidad Juárez del Estado de Durango Rosa Carmín González Peyro, Universidad Juárez del Estado de Durango <b>DIAGNÓSTICO DE LA INDUSTRIA DE JAIBA A PARTIR DE UN ESTUDIO DE LAS COMERCIALIZADORAS UBICADAS EN</b>
MARÍA BRENDA GONZÁLEZ HERRERA, UNIVERSIDAD JUÁREZ DEL ESTADO DE DURANGO ERNESTO GEOVANI FIGUEROA GONZÁLEZ, UNIVERSIDAD JUÁREZ DEL ESTADO DE DURANGO ROSA CARMÍN GONZÁLEZ PEYRO, UNIVERSIDAD JUÁREZ DEL ESTADO DE DURANGO DIAGNÓSTICO DE LA INDUSTRIA DE JAIBA A PARTIR DE UN ESTUDIO DE LAS COMERCIALIZADORAS UBICADAS EN LA REGIÓN COSTERA DE BAHÍA DE KINO, SONORA
María Brenda González Herrera, Universidad Juárez del Estado de Durango Ernesto Geovani Figueroa González, Universidad Juárez del Estado de Durango Rosa Carmín González Peyro, Universidad Juárez del Estado de Durango DIAGNÓSTICO DE LA INDUSTRIA DE JAIBA A PARTIR DE UN ESTUDIO DE LAS COMERCIALIZADORAS UBICADAS EN LA REGIÓN COSTERA DE BAHÍA DE KINO, SONORA
MARÍA BRENDA GONZÁLEZ HERRERA, UNIVERSIDAD JUÁREZ DEL ESTADO DE DURANGO ERNESTO GEOVANI FIGUEROA GONZÁLEZ, UNIVERSIDAD JUÁREZ DEL ESTADO DE DURANGO ROSA CARMÍN GONZÁLEZ PEYRO, UNIVERSIDAD JUÁREZ DEL ESTADO DE DURANGO DIAGNÓSTICO DE LA INDUSTRIA DE JAIBA A PARTIR DE UN ESTUDIO DE LAS COMERCIALIZADORAS UBICADAS EN LA REGIÓN COSTERA DE BAHÍA DE KINO, SONORA
María Brenda González Herrera, Universidad Juárez del Estado de Durango Ernesto Geovani Figueroa González, Universidad Juárez del Estado de Durango Rosa Carmín González Peyro, Universidad Juárez del Estado de Durango DIAGNÓSTICO DE LA INDUSTRIA DE JAIBA A PARTIR DE UN ESTUDIO DE LAS COMERCIALIZADORAS UBICADAS EN LA REGIÓN COSTERA DE BAHÍA DE KINO, SONORA
María Brenda González Herrera, Universidad Juárez del Estado de Durango Ernesto Geovani Figueroa González, Universidad Juárez del Estado de Durango Rosa Carmín González Peyro, Universidad Juárez del Estado de Durango DIAGNÓSTICO DE LA INDUSTRIA DE JAIBA A PARTIR DE UN ESTUDIO DE LAS COMERCIALIZADORAS UBICADAS EN LA REGIÓN COSTERA DE BAHÍA DE KINO, SONORA

GENERACIÓN DE CAPITAL SOCIAL A PARTIR DE LA EFICACIA, LA CULTURA Y EL APRENDIZAJE ORGANIZACIONAL. UN ESTUDIO CORRELACIONAL
Nidia Estela Hernández Castro, Universidad Autónoma de Coahuila Edna Isabel de la Garza Martínez, Universidad Autónoma de Coahuila Astrid Irais Ortiz Lugo, Universidad Autónoma de Coahuila
LA CONTABILIDAD MEDIO AMBIENTAL Y LOS IMPUESTOS AMBIENTALES APLICADOS EN LAS PYMES: CASO EMPRESAS AGRÍCOLAS DEL VALLE DE AUTLÁN JALISCO, MÉXICO1123
Martha Sheila Gómez González, Universidad de Guadalajara Mónica Araceli Reyes Rodríguez, Universidad de Guadalajara
LA RELACIÓN ENTRE LA INNOVACIÓN, LAS TICS Y LA CALIDAD: UNA PERSPECTIVA DE LA PYME IBEROAMERICANA 1135
Gonzalo Maldonado Guzmán, Universidad Autónoma de Aguascalientes Juan Ernesto Mojica Peñalba,Universidad de Panamá Víctor Manuel Molina Morejón, Universidad Autónoma de Coahuila
EL SUCESOR, FIGURA CLAVE EN EL ÉXITO DE LA EMPRESA FAMILIAR1141
Laura Leticia Gaona Tamez, Universidad Autónoma de Coahuila, Sandra Patricia de la Garza Cienfuegos, Universidad Autónoma de Coahuila, Rosa Hilda Hernández Sandoval, Universidad Autónoma de Coahuila
LA COOPERACIÓN INTEREMPRESARIAL Y SU RELACIÓN CON EL DESARROLLO DE LAS CAPACIDADES TECNOLÓGICAS EN LAS PYMES DE LA INDUSTRIA METALMECÁNICA DE LA REGIÓN CENTRO DE COAHUILA, EN MÉXICO
Zóchitl Araiza Garza, Universidad Autónoma de Coahuila Elvira Velarde López, Universidad Autónoma de Coahuila Maricela Chávez Rangel, Universidad Autónoma de Coahuila
FACTORES DE CAPITAL HUMANO Y CALIDAD DEL SERVICIO POSTVENTA EN EL SECTOR COMERCIO AUTOMOTRIZ EN BAJA CALIFORNIA
Raúl González Núñez, Universidad Autónoma de Baja California Marcela Reyes Pazos, Universidad Autónoma de Baja California
MODELO DE NEGOCIO DE LAS MIPYME: UN ANÁLISIS DESDE LA PERCEPCIÓN DE DIRECTIVOS DE LA COMARCA LAGUNERA
Víctor Manuel Molina Morejón, Universidad Autónoma de Coahuila María del Carmen Armenteros Acosta, Universidad Autónoma de Coahuila Oscar Plascencia Ávila, Universidad Autónoma de Coahuila José Daniel Barquero Cabrero, Business School ESERP Homero Martínez Cabrera, Universidad Autónoma de Coahuila
PERCEPCIÓN ESTUDIANTIL DE LA CALIDAD DEL SERVICIO EDUCATIVO EN EL BACHILLERATO
Oscar Reyes Sánchez, Universidad Autónoma de Baja California Marcela Reyes Pazos, Universidad Autónoma de Baja California Jesús Aurelio Veyna Roacho, Colegio de Bachilleres de Baja California
LAS INSTITUCIONES MICROFINANCIERAS EN LA INCLUSIÓN DE LAS REGIONES DE OAXACA
Rosa María Velázquez-Sánchez, Universidad Autónoma Benito Juárez. Oaxaca Omar Raúl Solana Vásquez, Universidad Autónoma Benito Juárez. Oaxaca

ARCELY GALÁN LÓPEZ, UNIVERSIDAD AUTÓNOMA BENITO JUÁREZ. OAXACA

LAS REDES DE CONOCIMIENTO: CASO MICROEMPRESA DEDICADA AL CULTIVO DE LANGOSTA LOCALIZADA EN PUEBLA, MÈXICO
María Antonieta Monserrat Vera Muñoz, Benemérita: Universidad Autónoma de Puebla Rafaela Martínez Méndez, Benemérita Universidad Autónoma de Puebla Gerardo Serafín Vera Muñoz, Benemérita Universidad Autónoma de Puebla
VALIDEZ DE CONTENIDO DE UN INSTRUMENTO DE MEDICIÓN DE LA COMPETITIVIDAD DE LAS PYMES VITIVINÍCOLAS DEL VALLE DE GUADALUPE, B.C., MÉXICO1200
Lino Meraz Ruiz, Universidad Autónoma de Baja California Sonia Elizabeth Maldonado-Radillo, Universidad Autónoma de Baja California
ESTUDIO DE LOS DE AMBIENTES DE APRENDIZAJE EN LAS PEQUEÑAS Y MEDIANAS EMPRESAS COMO DETONANTE DE ESTRATEGIAS QUE IMPULSEN LA COMPETITIVIDAD1205
Ma. de los Angeles Monterde Valenzuela, Universidad Estatal de Sonora Alonso Bustamante López, Universidad Estatal de Sonora
LAS MARCAS COLECTIVAS, UNA ESTRATEGIA ADMINISTRATIVA PARA EL EXITO COMERCIAL DE LAS ARTESANIAS: CASO "LA CATRINA DE CAPULA, MICHOACÁN"1212
Fabricio Guzmán Bedolla, Universidad Michoacana De San Nicolás De Hidalgo María Soledad Ramírez Flores, Universidad Michoacana De San Nicolás De Hidalgo
MÉTODO PARA DETERMINAR LAS VARIABLES DE INVESTIGACIÓN Y SU JERARQUÍA ACORDE AL GRADO EN QUE INCIDEN EN LA COMPETITIVIDAD INTERNACIONAL DE LAS EMPRESAS PORCÍCOLAS DEL CENTRO OCCIDENTE DE MÉXICO
Oscar Hugo Pedraza Rendón, UMSNH Iván Paz Prado, UMSNH
EL LIDERAZGO: ¿UN CONCEPTO DE COYUNTURA O UN NUEVO PILAR PARA LAS ORGANIZACIONES?1234
Jorge Acosta, Universidad de Santiago de Chile
DUALIDAD EN EL CRECIMIENTO ECONOMICO DE CHINA
Adriana Patricia Soto Aguilar, Benemérita Universidad Autónoma de Puebla. Elías Sosa Sánchez, Benemérita Universidad Autónoma de Puebla.
IMPLICACIONES ECONÓMICO-SOCIALES DEL MICROFINANCIAMIENTO PARA LOS MICRO Y PEQUEÑOS NEGOCIOS DEL SECTOR TERCIARIO DEL ESTADO DE COAHUILA
Rosalva D. Vásquez Mireles, Universidad Autónoma de Coahuila Yolanda Mejía de León, Universidad Autónoma de Coahuila Baltazar Rodríguez Villanueva, Universidad Autónoma de Coahuila
ANÁLISIS ESTRATÉGICO DE LAS INCUBADORAS DE BASE TECNOLÓGICA EN BAJA CALIFORNIA
Norma Leticia Vizcarra Vizcarra, Universidad Tecnológica de Tijuana Virginia Guadalupe López Torres, Universidad Autónoma de Baja California Santiago González Velásquez, Universidad Tecnológica de Tijuana
EL POSGRADO DE CALIDAD Y SU PRESUPUESTO BASADO EN BENEFICIOS ECONOMICOS
Oscar Guzmán Vargas, Universidad de Guadalajara
ESTRATEGIAS PARA EL MEJORAMIENTO DE LA CADENA DE SUMINISTRO PARA EL MODELO SCOR 1273
Tomás José Fontalvo Herrera, Universidad de Cartagena José Morelos Gómez, Universidad de Cartagena
EL LIDERAZGO COMO EJE DINAMIZADOR DE LA EQUIDAD SOCIAL

BEATRIZ EUGENIA AGUDELO ORREGO, UNIVERSIDAD AUTÓNOMA DE OCCIDENTE LEOPOLDO VÁSQUEZ ARANA, FUNDACIÓN COOMEVA

OPTIMIZACION MULTIOBJETIVO EN UNA CADENA DE SUMINISTRO UTILIZANDO ANALISIS ENVOLVENTE DE DATOS (DEA) MULTIOBJECTIVE OPTIMIZATION IN A SUPPLY CHAIN USING DATA ENVELOPMENT ANALYSIS (DEA)

Adel Mendoza Mendoza, Universidad del Atlántico

LA GESTION DE LA RESPONABILIDAD SOCIAL ORGANIZACIONAL, IMPACTADA POR LA GUÍA TÉCNICA COLOMBIANA GTC180: CASO APLICADO PYME DEL SECTOR SERVICIOS EN LA CIUDAD DE CALI, COLOMBIA 1292

MARÍA EUGENIA TORRES VALDIVIESO, UNIVERSIDAD AUTÓNOMA DE OCCIDENTE ÁNGELA MARÍA JIMÉNEZ TORRES, UNIVERSIDAD AUTÓNOMA DE OCCIDENTE

MARIA VIRGINIA FLORES ORTIZ, UNIVERSIDAD AUTÓNOMA DE BAJA CALIFORNIA ALFONSO VEGA LÓPEZ, UNIVERSIDAD AUTÓNOMA DE BAJA CALIFORNIA

NORMA LORENA ARENAS MOZQUEDA, UNIVERSIDAD ESTATAL DE SONORA Elsa Isabel Montaño Martínez, Universidad Estatal De Sonora Ana Bolena Sotelo Medina, Universidad Estatal De Sonora

JOSÉ ALEXANDER CARREÑO DUEÑAS, UNIVERSIDAD DEL ROSARIO

ANALISIS DE LA ESTRUCTURA FINANCIERA DE LAS EMPRESAS DEL SECTOR TURISMO, TEXTIL, LITO	GRAFICO,
METALMECANICO Y QUIMICO EN COLOMBIA 2000 - 2009	1336

ALBERTO ELIAS MUÑOZ SANTIAGO, FUNDACIÓN UNIVERSIDAD DEL NORTE MARIA ROYO BURBANO, FUNDACION UNIVERSIDAD DEL NORTE

ANÁLISIS DEL IMPACTO DE LA FINANCIACIÓN CON BONOS EN COLOMBIA EN EL SECTOR EMPRESARIAL EN LOS
AÑOS 2006 AL 2010

Alberto Muñoz Santiago, Fundación Universidad del Norte Jaime Delgado, Fundacion Universidad Del Norte Mariana Paramo, Fundacion Universidad Del Norte Alejandro Duque, Fundacion Universidad Del Norte

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MINERVA PARRA USCANGA, UNIVERSIDAD VERACRUZANA LORENA HERNÁNDEZ TREJO, UNIVERSIDAD VERACRUZANA SUZEL GÓMEZ JIMÉNEZ, UNIVERSIDAD VERACRUZANA JORGE RAFAEL OLVERA CARRASCOSA, UNIVERSIDAD VERACRUZANA MARÍA EUGENIA SENTIES SANTOS, UNIVERSIDAD VERACRUZANA

Blanca Rosa García Rivera, Universidad Autónoma de Baja California Sonia Elizabeth Maldonado Radillo, Universidad Autónoma de Baja California

María Concepción Ramírez Barón, Universidad Autónoma de Baja California Maricruz Lozano Ramírez, Universidad Autónoma de Baja California
EL CLUSTER FORESTAL COMO ESTRATEGIA DE INNOVACIÓN PARA UNA EMPRESA COMUNITARIA EXITOSA 1359
Francisco Javier Castro Sánchez, Universidad Michoacana de San Nicolás de Hidalgo Oscar Hugo Pedraza Rendón, Universidad Michoacana de San Nicolás de Hidalgo
PROCESO DE MEDICIÓN EN LAS ACTIVIDADES DE INVESTIGACIÓN1368
Alma Delia Inda, Universidad Autónoma de Baja California Gloria Muñoz del Real, Universidad Autónoma de Baja California <b>AULA DE MEDIOS CON APOYO DE LAS TECNOLOGÍAS DE LA INFORMACIÓN Y COMUNICACIÓN</b> Lourdes Letici Chávez Álvarez, Universidad Autónoma de Baja California Esteban Pérez Flores, Universidad Autónoma de Baja California Lorenzo Omar Martínez González, Universidad Autónoma de Baja California Alejandro Vargas Acosta, Universidad Autónoma de Baja California
PROPUESTA DE HERRAMIENTAS ALTERNATIVAS UTILEZ EN LA PLANEACIÓN ESTRATEGICA: ESTUDIO DE CASO NEGOCIO DE SERVICIOS Y SU UBICACION
Yenisey Castro García, Universidad Michoacana de San Nicolás de Hidalgo Virginia Hernández Silva, Universidad Michoacana de San Nicolás de Hidalgo José César Lenin Navarro Chávez, Universidad Michoacana de San Nicolás de Hidalgo
COMPETENCIAS GERENCIALES DE LA INDUSTRIA DE MUEBLES
Maria del Carmen Domínguez Ríos, Universidad Nacional Autónoma de México Michele Alexandra Corona Domínguez, Benemérita Universidad Autónoma de Puebla
EVALUACIÓN PROCESO INTEGRAL, RESPONSABLE Y RESPETUOSO1397
Juan Manuel Chávez Escobedo, Universidad Autónoma de Nuevo León Juan Guadalupe Martínez Macías, Universidad Autónoma de Nuevo León Jesús Osorio Calderón, Universidad Autónoma de Nuevo León
LA ACCIÓN TUTORIAL EN LA FORMACIÓN DEL ESTUDIANTE UNIVERSITARIO NICOLAITA
Zoila Margarita García Ríos, Universidad Michoacana de San Nicolás de Hidalgo María del Henar Pérez Herrero, Universidad de Oviedo
EVALUACIÓN DE LA INDUSTRIA MAQUILADORA SECTOR ELECTRÓNICO, BAJO UN ENFOQUE SUSTENTABLE COMPETITIVO
María Esther Ibarra Estrada, Instituto Tecnológico de Tijuana Sofía Elba Vázquez Herrera, Universidad Popular Autónoma del Estado de Puebla Ramón Valdivia Alcalá, Universidad Popular Autónoma del Estado de Puebla
ANÁLISIS DE LA PRODUCCIÓN CIENTÍFICA DE UN CENTRO DE INVESTIGACIÓN EN MÉXICO1418
Elizabeth Avilés Becerril, Universidad Autónoma de Baja California María Concepción Ramírez Barón, Universidad Autónoma de Baja California Blanca Rosa García-Rivera, Universidad Autónoma de Baja California Sonia Elizabeth Maldonado-Radillo, Universidad Autónoma de Baja California
OPINION DE EMPLEADORES1421
Juan Cortes Botello, Universidad Autonoma de Baja California Gonzalo Llamas Bañuelos, Universidad Autonoma de Baja California
MERCADO LABORAL Y EMPLEABILIDAD DE LOS EGRESADOS DE LAS CIENCIAS ADMINISTRATIVAS
GONZALO LLAMAS BAÑUELOS, UNIVERSIDAD AUTONOMA DE BAJA CALIFORNIA

JUAN CORTES BOTELLO, UNVERSIDAD AUTONOMA DE BAJA CALIFORNIA

INDEX OF AUTHORS	1435
UNIVERSITIES AND INSTITUTIONS REPRESENTED	1439
COUNTRIES REPRESENTED	1441

### **ENGLISH PROCEEDINGS**

### EFFECTS OF ACCESS TO MICROCREDIT ON THE GROWTH OF WOMEN-OWNED SMALL AND MEDIUM ENTERPRISES IN THE CENTRAL BUSINESS DISTRICT OF KISUMU: THE CASE OF KENYA WOMEN FINANCE TRUST

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Microcredit is a crucial tool for economic empowerment of women. In Kenya, the microcredit industry has supported more than 3 million small and medium enterprises for close to 30 years. Kenya Women Finance Trust is a leading microcredit institution dealing exclusively with financing needs of women. However, whether the services provided by the institution have spurred growth among women-owned enterprises remains undocumented. The objective of this study was to assess the effect of access to microcredit services on the growth of women-owned enterprises within the Central Business District of Kisumu City. To accomplish this, we sourced primary data from 190 women entrepreneurs. The study found that access to microcredit significantly associated with sales, net profit, number of paid workers and liabilities. Thus, access to microcredit had positive effects on the growth of women-owned enterprises for women and to changes in the business environment. This undermined the potential of funded enterprises to achieve sustainable growth. The study recommends the need to review the financial institution's lending policies, increase the amount of microcredit funds and encourage other actors to finance women-owned enterprises.

#### **JEL:** 016

**KEYWORDS:** Access, Microcredit, Small and Medium Enterprises, Women-Owned, Central Business District

#### **INTRODUCTION**

Microcredit provides an opportunity for low income-earners, including women to improve their economic and social status. Besides economic empowerment, microcredit carries with it numerous other benefits for women, including better control of their reproductive health as well as reduced vulnerability to domestic violence. Better incomes make women less vulnerable to gender-based violence perpetuated by their partners (Goetz & Sen, 1994; Mayoux, 1998a). In most countries, commercial banks have not effectively addressed the financial needs of low income-earners, due to stringent baseline requirements. In addition, commercial banks perceive low income-earners as not being credit-worthy due to lack of assets, which they may use as collateral against credit facilities (World Bank, 2009). In this regard, credit facilities provided by Micro-Finance Institutions (MFIs) plays an important role by filling the gap for financial services among low income-earners, majority of who include women.

The origin of microcredit is traceable to the 14<sup>th</sup> Century, when the Franciscan monks founded the community-oriented pawnshops (World Bank, 2009). A study conducted by the World Bank (1999) indicated that about 25 million people worldwide were using microcredit to finance their business activities, with women forming up to 90% of beneficiaries. By 2005, up to 113 million borrowers had benefited from microcredit services and by 2010, microcredit industry addressed the financing needs of up to 150 million low income-earners, especially in developing countries (World Bank, 2009). In Kenya, the microcredit industry is a relatively new phenomenon, with a few agencies starting about 25 years ago.

Due to rapid development in Kenya's economic landscape, the agencies eventually graduated into vibrant institutions in the 1990s (Hospes, Musinga & Ong'ayo, 2002). Between 1992 and 1994, the Government was intensively involved in implementing the Structural Adjustment Programmes (SAPs). In this regard, the aim of economic liberalization was to restore macro-economic stability and spur private sector investments. To counter the potential negative impact of liberalization, microcredit industry emerged as one of the areas requiring donor support.

By 2001, about 1.3 million SMEs were operational in the country and provided job opportunities to about 2.4 million people; and accounted for about 70% of economic activities (Hospes et al., 2002). By 2008, SMEs created employment for about 75% of the national workforce and contributed up to about 22% of the national Gross Domestic Product (GDP). In Kisumu town, the role of SMEs as regards employment creation needs no amplification. By 2008, the sector engaged more than 40% of the district's labour force (Columbia University, 2007; NCAPD, 2008). Kenya Women Finance Trust (KWFT) is one of the institutions that have shaped the microcredit industry in the country by extending microcredit facilities to women-owned SMEs (Odhiambo, 1985; Hospes et al., 2002; Republic of Kenya, 2008). Established in 1982, KWFT has an elaborate national network of 9 regional offices, supported by 77 sub-regional offices. KWFT empowers women by providing accessible and affordable financial services.

Microcredit facilities are important for the growth and expansion of Small and Medium Enterprises (SMEs) and for their subsequent role in the national economy (Atieno, 2009). The growth and expansion of SMEs requires sustained investment in working capital. However, at low levels of income, the accumulation of such capital may be difficult. Under such circumstances, microcredit facilities may help small-scale entrepreneurs improve their incomes and accumulate own capital (Hossain, 1988; Atieno, 2001). KWFT have exclusively served the financing needs of women-owned SMEs; however, whether the microcredit services provided by the institution has spurred growth in the performance of women-owned SMEs, especially within the Central Business District (CBD) of Kisumu City remains unclear and undocumented. Against this background information, this study determined the effect of microcredit services provided by the KWFT on the growth of women owned SMEs within the CBD of Kisumu City. The resultant information is useful for development agencies, as well as scholars in microfinance, entrepreneurship as well as gender and development.

#### DATA AND METHODOLOGY

The study population consisted of women-owned SMEs operating within the CBD of Kisumu City. We sourced primary data from 190 women SME owners who had received microcredit from KWFT and stayed in business for at least three years. We also sourced secondary data through a review of KWFT registers and reports, as well as relevant empirical and policy literature. We used stratified random and purposive sampling procedures to obtain samples of SMEs and women entrepreneurs, whom were engaged in interviews between May and June 2010. Furthermore, we applied the Statistical Package for Social Sciences (SPSS) package to generate frequency distributions, percentages and cross-tabulations. The analysis of qualitative data involved organization into thematic areas, description and thematic analysis. The following publications support the methodology that we applied in this study: Best & Khan, 2004; Kothari, 2004; Bryman & Cramer, 1997; Mugenda & Mugenda, 1999; Nachmias & Nachmias, 1999.

#### **RESULTS AND DISCUSSIONS**

The study covered a total of 190 women entrepreneurs, each representing and providing information about their enterprises. All the participants reported having received microcredit from Kenya Women Finance Trust (KWFT) to support their businesses. Of the 190 participants, the majority, [110 (57.9%)] had received microcredit from KWFT trust only once; 66 (34.7%) participants had been funded twice, 11 (5.8%) had received microcredit thrice, while 3 (1.6%) had been funded more than thrice. In addition,

table 1 indicates that the SMEs represented in the study were involved in various lines of business, including hairdressing, clothing boutique, tailoring, food selling and retailing, among others.

Table 1: The Type	of Business for	SMEs Parti	cipating in	n the Study

CATEGORY OF SMES	FREQUENCY	PERCENT
Hairdressing	13	6.8
Clothing boutiques	49	25.8
Tailoring	51	26.8
Food selling	17	8.9
Hair dressing /clothing boutiques	12	6.3
Tailoring/clothing boutiques	14	7.4
Retailing	26	13.7
Others	8	4.2
Total	190	100.0

Table 1 presents the type of business activities carried out by the small and medium enterprises involved in the study. As reflected in the frequency distributions, most business ventures dealt in tailoring activities, clothing boutiques and retailing business. The category lumped as 'others' included hardware shops, bookshops and dry-cleaning outlets.

Moreover, table 1 shows that some SMEs were involved in more than one business activity. In this regard, 12 (6.3%) respondents stated that they were involved in both hairdressing and clothing boutiques, while 14 (7.4%) respondents operated tailoring and clothing boutiques. The table also reveals a preference towards certain business lines such as clothing boutiques and tailoring shops among women. We measured access to microcredit in terms of the number of times one had obtained credit from KWFT, and the growth of SMEs in terms of change in sales volume, net profits, number of paid workers as well as the trend of liabilities before and after obtaining credit. As indicated in table 2, 140 (73.7%) respondents felt that their enterprises were very inactive in terms of sales before receiving microcredit; however, after credit, up to 160 (84.2%) participants were convinced that their SMEs became more active - an indication that performance in terms of sales improved for more than 80% of the SMEs that received microcredit from KWFT.

Table 2: Business Performance in Terms of Sales Before and after Credit
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SALES	BEFORE	BEFORE CREDIT		AFTER CREDIT	
	Frequency	Percent	Frequency	Percent	
Very active	11	5.8	29	15.3	
Active	32	16.8	160	84.2	
Inactive	7	3.7	0	0.0	
Very inactive	140	73.7	1	0.5	
Total	190	100.0	190	100.0	

This table indicates the opinion of women business owners regarding the activeness of their firms in terms of sales before accessing microcredit and after accessing microcredit from Kenya Women Finance Trust. The results suggest that a significant majority of women entrepreneurs (84%) believed that their firms became more active after accessing microcredit than before [n=190;  $\chi^2$ =7.34; 3df; p=0.05 (critical value  $\chi^2$ = 3.16)].

The results yielded a computed chi square value of 7.34 with 5 degrees of freedom. The results were statistically significant within 5% error margin, leading to the rejection of the null hypothesis stating that *there is no statistical association between access to microcredit from KWFT and the growth of SMEs in terms of sales* because it contradicted empirical evidence. This implies that there was some significant association between access to microcredit accessing microcredit than before. Through improved sales, SMEs were likely to experience higher growth after accessing microcredit than before. Through improved sales, SMEs were in a better position to improve revenues and accumulate capital resources for reinvestments. In conclusion, access to microcredit facilities is likely to have a positive effect on the growth of SMEs in terms of sales. We requested participants to indicate if there was any change in net profits, looking at the period before and after receiving microcredit from KWFT. The results presented in table 3 below shows that the majority, [152 (80.0%)] participants were of the view that their SMEs

registered dismal performance in terms of net profits before accessing microcredit from KWFT. After funding, up to 166 (87.4%) participants indicated that there was a positive change in net profits.

CHANGE IN PROFIT	BEFORE CREDIT		AFTER CREDIT	
CHANGE IN FROFII	Frequency	Percent	Frequency	Percent
Profit increased	18	9.5	166	87.4
No change in profit	20	10.5	17	8.9
Profit decreased	152	80.0	7	3.7
Total	190	100.0	190	100.0

Table 3: Performance Before and After Access to Credit in Terms of Profits

This table presents women business owners' opinion regarding change in net profits before accessing microcredit and after accessing microcredit from Kenya Women Finance Trust. The results suggest that a significant majority of women entrepreneurs (87%) believed that net profits changed positively after accessing microcredit than before  $[n=190; \chi^2 = 13.144; 2 df; p=0.05; (critical \chi^2 = 5.991)]$ .

The results obtained a computed chi square value of 13.0, with 6 degrees of freedom, which was statistically significant within 5% error margin. This led to the rejection of the null hypothesis stating that *there is no statistical association between access to microcredit and the growth of SMEs in terms of net profits* because it was inconsistent with actual data. The results suggested up to 95% chance that access to microcredit provided by KWFT was statistically associated with the growth of women-owned SMEs. We requested participants to state the number of paid workers they had before and after receiving microcredit from KWFT. The results showed that up to 141 (74.2%) SMEs had between 1 and 9 paid workers, 41 (21.6%) had between 10 and 19 workers, while 8 (4.2%) had 20 workers or more. More still, table 4 presents the results obtained from the bivariate analysis regarding change in the number of paid workers between the pre-credit and post-credit periods. The results suggest that there was a general increment in the number of paid workers.

Table 4: Variation in the Number of Paid Workers

NUMBER OF PAID WORKERS	BEFORE CREDIT		AFTER CREDIT	
	Frequency	Percent	Frequency	Percent
1 to 9 workers	128	67.4	135	71.1
10-19 workers	54	28.4	40	21.1
20 workers+	8	4.2	15	7.9
Total	190	100.0	190	100.0

The table shows women business owners' opinion regarding change in the number of paid workers before accessing microcredit and after accessing microcredit from Kenya Women Finance Trust. The results suggest that there was a general increment in the number of paid worker  $[n=190; \chi^2=16.22; df=2; p=0.05; (critical \chi^2=5.991)].$ 

The analysis obtained a computed chi square value of 16.22, with 3 degrees of freedom. This was statistically significant within 5% error margin, leading to rejection of the third null hypothesis, which stated that *there is no significant association between access to microcredit and the growth of SMEs in terms of number of paid workers*. The results implied up to 95% chance that access to microcredit provided by KWFT was associated with growth of women-owned SMEs in terms of number of paid workers. This suggests that most SMEs experienced increased performance after receiving microcredit, which necessitated the number of paid workers to go up. In conclusion, access to microcredit is likely to spur SME growth, which in turn is likely to create more employment opportunities.

The level of indebtedness is yet another indicator of whether an SME is growing or not. We further asked participants to state if there was any change in the trend of liabilities, during the period before and after obtaining funding from KWFT. As indicated in table 5, liabilities were increasing for majority of participants [164 (86.3%)] before accessing microcredit. However, this trend changed for the majority, [163 (85.8%)] who indicated that their liabilities were decreasing after accessing microcredit from KWFT.

CHANGE IN LIABILITIES	BEFORE CREDIT		AFTER CREDIT	
	Frequency	Percent	Frequency	Percent
Liabilities increasing	164	86.3	19	10.0
No change in liabilities	12	6.3	8	4.2
Liabilities decreasing	14	7.4	163	85.8
Total	190	100.0	190	100.0

#### Table 5: Liability Status Before and After Credit in Terms of Liabilities

This table presents the perceptions of women business owners' opinion regarding change in liability status before accessing microcredit and after accessing microcredit from Kenya Women Finance Trust. The results show that for most participants (86%), liability was decreasing after accessing microcredit from the financial institution [n=190;  $\chi^2$ =9.02; 2 df; p= 0.05; (critical  $\chi^2$ = 5.991)].

In addition, he results obtained a computed chi square value of 9.02 with 3 degrees of freedom, which prompted rejection of the null hypothesis stating that *there is no statistical association between access to microcredit and the growth of women-owned SMEs in terms of the level of liabilities.* This suggests up to 95% chance that access to microcredit provided by KWFT significantly associated with the growth of women-owned SMEs in terms of liability status.

#### CONCLUSIONS

Access to microcredit remains instrumental for the growth of women-owned SMEs. The key indicators of growth considered in this study included sales volume, net profits, the number of paid workers, and the trend of liabilities before and after receiving microcredit. The study found that access to microcredit significantly associated with all these indicators of growth. The results suggested up to 95% chance that SMEs experienced higher sales and better profits after accessing credit from KWFT. This enabled SMEs to hire more paid workers to support increasing production and to reverse liability trends. In conclusion, adjusting lending policies to be consistent with the actual financing needs of women, and business environment is likely to strengthen the role of KWFT, as a leading pro-women microcredit institution in the country.

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### ROLE OF CORPORATE GOVERNANCE IN THE FAMILY BUSINESS

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#### ABSTRACT

Problems of governance, associated with the Public Company, have also emerged in other types of businesses, for example in family firms. What takes place in family firms, albeit with different degrees of intensity, is an overlap, rather than the separation, of ownership and governance. In the start-up phase all the distinctive traits of entrepeneurship converge in the figure of the businessman; depending on certain affective, psychological, financial and/or professional factors, this can lead to a blurring of the distinction between the rules and needs of the family on the one hand, and those of the business on the other. In small scale family firms, the system of governance is not a significant issue because, besides not being formalised explicitly, it often represents a synthesis or in some cases a compromise between the values of the family may occur, which causes a gradual erosion of the centrality of the entrepreneur, as well as of his ability to deal with internal conflicts. In the absence of an absolute leader, the relationship between corporate and family governance, may degenerate into inter-familial conflicts, with knock-on implications for the management of the business. In such cases, the family council can intervene to reconcile the interests of actors who are, at one and the same time, the owners, controllers, and managers.

KEYWORDS: governance, family business, performance

**JEL:** F0; F13; F23

#### **INTRODUCTION**

Governance is a topic of great relevance and currency and one that continues to attract growing interdisciplinary interest; considered as a fundamental driving force for business, governance also represents a valid instrument for the pursuit of positive business performance. Contributions in the literature stress the importance of governance as a useful instrument for a company policy which manages to express and achieve the harmonic functioning of the organisation. The expression *corporate governance* nonetheless continues to be an ambiguous one, without a fixed meaning; this has largely contributed to increasing its indeterminateness. The word *governance* expresses the mechanisms through which relations between the various subjects involed in a company's activity – among these, the shareholders, administrators, executives, investors, and other financial agents who might enter into contact with it – are regulated. The aim of *corporate governance* is to limit the possibility of opportunistic behaviour within company relations. This is in order to avoid problems of agency which may relate to, under different perspectives, either an agent (the manager) and several principals (shareholders, creditors, employees, suppliers, clients, etc.), or one principal (the entrepreneur) and several agents (managers, investors, employees, etc.). A good system of corporate governance can thus ensure an improvement in the quality of life of the firm.

Problems of corporate governance in the context of the diffused shareholding Public Company and thus characteristic of the Anglo-Saxon world, have gradually also arisen in other contexts and types of business, for example in the family firm. What often happens in the family firm, albeit with different degrees of intensity, is the overlapping of ownership and governance, rather than their separation (Denis D., Sarin A., 2000). This points to a cultural delay and implies two distinct consequences, both of which have precise implications for the model of governance. On the one hand, it can alter the balance of power

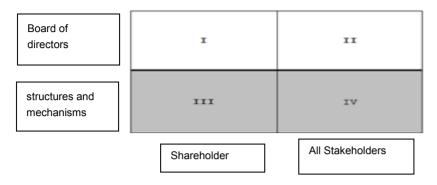
within the family entourage, either because of the number of members, or because some of them do not possess adequate skills and knowledge to take on managerial roles. On the other hand, the process of the development and growth of the family firm, alongside which often occurs a broadening of the management team, may result in the entry into the firm of non-owner managers, who work alongside the family members, without replacing them. In this latter case, a gradual separation may arise between the owners and that part of the management which is actively involved in the running of the firm and thus its future. The two categories become critical variables for the continuity of the family firm and as such they must be adequately managed through careful planning of governance structures with the aim of achieving an effective balance keeping the family and the business united, and ensuring the peaceful and productive coexistence of the two institutions.

#### LITERATURE REVIEW

In an article from 1937, Coase uses the concept of governance to refer to those coordinating mechanisms internal to the firm which reduce market originated transaction costs (Coase, 1937). Later, in 1979, Williamson takes up the term governance in his theory of transaction costs, to describe alternative forms of financial organisation to the market and hierarchy. In his theory, governance designates the coordination modalities of those individual and organisational actions, different from hierarchies and the market, through which the construction of the social order is achieved (Williamson, 1979).

According to Rhodes' classification (Rhodes, 1996), on the other hand, the concept of governance assumes two further meanings which may be defined as "Minimal Status" and "Corporate Governance". The term "corporate governance" was used for the first time by Eells (Eells, 1960) to indicate "the structure and the functioning of company policy" and, thus, the governance of the businesses. Shleifer and Vishny (Shleifer, Vishny,1997), speak of corporate governance as of a complex system of rules aimed at guaranteeing adequate returns on the capital supplied by the investors. In such a system we find those mechanisms directed to the regulation of agency relations between the top, the executive, and the bottom, often wide and fractioned, of holders of ownership rights. Zingales (Zingales, 1998), uses the term corporate governance as a synonym for the exercise of authority, direction and control.

Monks and Minow (Monks, Minow, 2004), represent corporate governance as the whole of the relations between the board of directors, the owners and the managers. Daily, Dalton e Cannella (Daily, Dalton, Cannella, 2003) conceive of corporate governance as the determination of the different uses for which organisational resources are deployed and the resolution of conflicts between the various participants in the organisation. For Huse, (Huse, 2006), on the other hand, corporate governance is defined as the interaction between the coalitions of internal actors, external actors and the members of the board of director, aimed at creating value. In the literature, the concept of corporate governance is often linked to that of *outsider* and *insider*, defining it precisely as the complex of rules through which investors (outsiders) protect themselves against the risk of expropriation from those who control the firm which, depending on the case in question, may be the majority shareholder or the management (insiders). Despite the numerous contributions to the literature, there continues to be no agreed and shared definition of corporate governance. Authors interested in the topic have adopted definitions which differ both in the extension and variety of stakeholders considered in the governance process (shareholders, managers, employees, the State, consumers, investors, etc.), and for the breadth and variety of corporate bodies or mechanisms considered responsible for governing the firm (the board of directors, the managers, the board of statutory auditors, etc.). Combining, on the one hand, the "interests involved in the process of corporate governance" and, on the other, the 'structures and mechanisms of corporate governance' we obtain a matrix where we place the most commonly used definitions of corporate governance (Figure 1).



Interests considered in the process of corporate governance

In Quadrant I are studies which predominantly take into account the shareholders' perspective and leave the responsibility of financial governance to the board of directors. The Board of Directors (BoD) thus becomes the main body in the structure of governance, and scholars' attention focuses on its composition in terms of numbers, degree of independence, and ability to carry out a controlling function to safeguard shareholders from potentially opportunistic behaviours by the management.

In Quadrant II we find those who recognise the importance of a plurality of stakeholders to be taken into account in performing the function of business governance and who at the same time, consider the *board of directors* as the only governing body of the firm. This *multi-agency approach* broadens the responsibilities of the BoD which has as its *principal* the owners-shareholders, but also a broader range of actors. In Quadrant III we find definitions of corporate governance which contemplate the protection exclusively of the owners' interests through a great number of bodies and mechanisms, internal and external to the firm. In this case, corporate governance must seek to guarantee and safeguard the suppliers of risk capital (shareholders), and make sure the managers maximise *shareholder value* through a more institutional structure which is more varied and more complex than the simple board of directors.

In Quadrant IV, an extended definition of corporate governance is given, which does not consider exclusively the interests of one class of subjects (the shareholders-investors), but places them, rather than in a position of total supremacy, on a privileged plane relative to other actors who nonetheless play a role in the growth of the firm. Further, the protection of diverse interests is not the exclusive prerogative of the board of directors or other formal bodies, but it is obtained through a complex web of relations between the institutional environment and characteristics specific to the firm.

#### Governance And Family Firms

The dichotomy between family and non-family firms is particularly evident most of all in terms of models of corporate governance. Once again, the differentiating factor is the family, sometimes drastically described as an element of interference, and other times, seen as the driving factor of success. Corporate governance is influenced by the capitalistic system of the country in which the family firm is located and it presents particular aspects which derive from the coexistence of the two institutions, the "business", on the one hand, and the "family", on the other, guided by two contrasting logics "rationality", and "sentiment", respectively (Ward, 1997). Contrary to what is often thought, government structures of family firms are often more complex than those of other types of business; further, there exists no valid and fixed model of corporate governance per se which may allow us to identify them. In fact, even a simple search for common traits between the governing structures of family firms turns out to be

particularly complicated for two reasons:

1) the arbitrariness in identifying a firm as a family firm, due to the lack of an unambiguous definition of *family firm*;

2) differences arising from the multiplicity of "guises" in which this typology can manifest itself: quoted family firm, totalitarian control based family firm, multiple-ownership family firm, first generation family firm or subsequent generations family firm.

The corporate governance model adopted by *family firms* is closely tied to the influence of the owner family and often represents a synthesis and sometimes even a compromise, between family values and business roles (Anderson, Jack, Drakopoulou-Dod, 2005). Only by focusing attention on the family and the firm at the same time does it become possible to draw out the lines of an adequate system of governance which can allow the two institutions to interact positively despite their different aims, values and organisational structures. The family is primarily concerned with the sustenance and wellbeing of its members; it is driven by a logic which appeals to sentiments, unity, tradition and harmony. The firm, on the other hand, has the sole aim of generating products and services through a results oriented behaviour. Its values are rationality in decision-making, the ability to adapt to changes in the market and so on. The interweaving of family problematics with those of the firm and the reciprocal influence of the two institutions (firm and family), inevitably impact on the composition of the structure of governance.

For example, in business contexts characterised by forms of absolute control, the overlapping between the family and the firm is greatest; in other words the family hierarchy is transferred onto the firm, meaning that the firm is not seen as an autonomous and external financial entity, but as a family "affair" and as such, one to be managed by members of the family only. The most likely situation in this case, and certainly the most realistic one too, is one in which the system of governance coincides with the entrepreneur himself. The latter often opts for systems of governance which tend not to be made explicit, and for a distribution of responsibility and power amongst family members only. In this case, it is rare to find an instituted board of directors or, where there is one, it is in most cases lacking in effective power and its presence is imputable simply to a mere bureaucratic function of a formal nature. On the other hand, in a medium to big scale firm, governance is generally based on complex organisational structures in agreement with an adequate system of norms (laws, Codes of Self Discipline).

#### Governance Models In Family Firms

In family firms, as for the other typologies of firms, there exists no one model of governance which is absolutely valid in every context, and even within the same business context, the structure of governance is not fixed but may change over time (Zocchi, 2008). Depending on the specific situation and timeframe considered, very different types of institutional structures can prevail (Solomon, 2007). However, we can note today a convergence towards a common model. Alongside the classical financial framework based on firm controlling rights, the literature has found two different interpretational frameworks: the *outsider system* and the *insider system*. Such models are conducible to the Anglo-Saxon experience and to the German-Japanese experience, respectively.

The *outsider system*, also defined *market oriented*, refers to a model in which the capital market represents the most efficient regulating mechanism for the potential conflict of interests between shareholders and manager. Businesses operating on this model are public companies. These are characterised by an extremely widespread distribution of capital, by a *shareholder* interest oriented decision-making process, by an efficient capital market and by the possibility of a conflict of interest between shareholders and managers. The main problem arising from such a conflict is the potential presence of agency costs, that is the costs of information and controls necessary to guaranteeing that the behaviour of the (strong) management keeps in line with the aims of the (weak) shareholders. In the *outsider system* model, shareholders can exit from the business at any time through the sale of the share in

their possession. Further, they are protected by a *common law* system characteristic of Anglo-Saxon countries where invigilating bodies establish stringent conditions that the firms are obliged to comply with, or else their market quotation will suffer. The system of corporate governance which follows from this is centred, mainly, on a shareholders vs. managers dialectic and on the role of the market as the external conflict regulator between interests that have a tendency to diverge.

At the opposite extreme we have the *insider system* model, typical of those situations which constantly seek compromises between the various stakeholders involved in the productive activity of the business. Precisely for this reason it is also defined as *relationship based*. It is commonly found in countries such as Japan and Germany and is characterised by a not very efficient capital market and by the presence of numerous financial intermediaries within the firms. Firms operating in such an environment are characterised by the presence of concentrated shareholding and, for this reason, they are defined as low-contestability, closed-capital firms. In the *insider system* model, the decision-making process mainly takes into consideration the interests of *stakeholders* over those of the *shareholders*.

Putting together, on the one hand, the business structure and on the other, its stability and variability, it is possible to classify the different models of corporate governance. If we consider the composition of the firm structure, we have cases in which the shareholding is unified, and cases in which on the other hand it is spread across a plurality of often heterogeneous subjects, and no single actor retains a sufficient number of shares to exercise control. Examining this first aspect, we may distinguish companies with capital concentrated into the hands of one individual or one family, from companies whose the capital is divided between several subjects, who may be savers, institutional investors, employees, and so on.

As regards the stability or variability of the shareholding structure, we can distinguish two different situations: one is characterised by stable shareholding, at least as regards the part relative to the control of the firm, the other characterised by unstable shareholding, subject to frequent changes due to the sale and purchase of shares. Crossing the two variables analysed above we obtain three different models of corporate governance:

*Diffused ownership firm:* (unstable and divided shareholding): characteristic of Anglophone countries, it recalls the scheme of the *outsider system* and it is distinguished by the distribution of share capital over a wide number of savers. Also defined *public company*, it is characterised by the separation of ownership and control of the firm; the first belonging to share owning partners, the second to administrators who provide corporate governance. It follows is that the identification between shareholders and the firm is limited, the main objectives are short term and aimed at immediate profit. In Italy this type of firm is not common; one of the main causes for this being the presence of numerous family firms, both large and small scale, which are particularly "attached" to traditional forms of activity, thereby impeding the take-off of the "public company".

*Closed ownership firm:* (unified and stable shareholding): typical of those countries which have so-called domestic capitalism, it is well suited to small scale economic situations. Also defined as "family firm", because guided by an entrepreneur who decides and establishes its fate, it is distinguished from the *public company* by the concentration of shares in the hands of a few subjects, who, in the majority of cases, are tied to one another by kinship and family ties. Further, in this type of firm thanks to the passion, entrepreneurial spirit and the involvement of the major shareholder, entrepreneur and owner, who devotes his whole life to the firm, which he conceives of as his own creature, we find:

- Rapidity in decision-making;
- Little bureaucratic organisation;

- Sudden changes of direction;
- Emotional involvement with the employees.

However, alongside its evident advantages, the closed ownership family firm is still subject to certain risks and limits. In fact, the firm is financially very weak because its opportunities for growth are connected to the financial position of the owner alone, which may be insufficient for certain types of investment. As a consequence, if this is indeed the case, this model does not contribute to creating value. In fact, because of the lack of capital, the entrepreneur is often forced to forsake opportunities for growth and development or, alternatively, he is either obliged to resort to higher levels of indebtedness or of further conferment of his own capital, which may involve running the risk of losing control of the firm with the entry of external subjects. Moreover, in closed ownership family firms, unlike the *public company*, there is a lack of high quality managers who possess specific professional skills and competencies. This happens because the limited opportunity for growth impedes the professional development of these subjects. As a consequence, the results obtained, inextricable from the skills of the major shareholder entrepreneur and owner, or majority partner, are achieved in the short and medium term, but they may be invalidated in the long term, due to the problems of succession; on account of this experts in the sector consider such a model to be fragile.

Restricted ownership firm: (stable and divided up shareholding): this characterises the majority of German and Japanese firms. Its presence, however, can be found in other contexts too; for example, certain large French firms. This model is characterised by a particularly complex firm structure which includes a wide range of institutional investors who are different from both the shareholders and the managers. As regards its profile, like the *public company*, it is formed by a clearly defined business group which, similarly to the family firm, and differently from the public company, remains relatively stable over time. In this model of corporate governance, the stable part of the capital is possessed by a restricted number of shareholders, banks, and other investors who effectively control the business. The remaining shares are made available on the market to a wide number of small savers who regard the firm as a financially profitable investment opportunity. In a restricted ownership firm, the fact that no one shareholder alone occupies a position of absolute majority, the possibility that personal interests dominate business decisions is obviated. In fact, this is the main characteristic distinguishing this model from the two previously described. Thus each investor, independently of their personal situation, looks to deploy their capital with the stability of the firm in mind; what counts ultimately is the survival of the business over time. The three types of ownership structure all present specific problems which it is good to be aware of in order to run the firm, efficiently both in periods of stability and, most importantly, in periods of transition. In the latter case, an analysis of the structure of corporate governance can ensure the timely planning of firm-family relations, with particular attention to the means of transmission from one generation to the next and with an eye to both the past and the future. A correct structuring of such relations is seen herein as the necessary condition for the continuity both of the family firm and of the family itself.

#### Governing Bodies of Family Firms

Generally, in small scale family firms, problems of financial governance are less relevant. The concentrated ownership structure and the overlapping of ownership and control, limit the possibility that those who have control may expropriate the shareholders who are not directly involved in the management of the firm. The structure of governance is thus both simple and informal and it presents itself as follows: a Board of Directors (BoD), or a sole administrator. The BoD is made up of a limited number of people, usually coinciding with those who supply risk capital and with other people who are connected to the family by family ties. In large scale family firms, it often occurs that the majority shareholder or shareholders, even if not directly involved in the management of the firm, nonetheless

have both the ability and see it in their interest to control the operation of the management which finds itself obliged to make decisions guided not by economic rationality, but rather by the needs of the controlling family. The sole presence of family members on the BoD may not be a good thing, as often those board members who have ownership of the capital do not necessarily have the managerial skills to use it wisely. The entrepreneur, who lacks the ability to deal with particular business situations (moments of crisis, growth processes, organisational changes, generational turnover of management), needs to have alongside him trustworthy people with specific skills, who know the firm's business well and can contribute actively to taking the most delicate decisions, thereby guaranteeing a stable and durable equilibrium. Outsiders involved in the management of the firm are too often linked to the family by long standing ties of collaboration and/or friendship. If this on the one hand makes more formal the behaviour of the family partners and leads to a concrete functioning of the governing bodies, on the other hand it makes difficult reaching a shared vision through which the firm can be lead.

This can be attributed to the presence of the different cultures of the family partners and of third parties external to the family clan. In any case, entry into the family firm of outsider directors, that is, external administrators, who are not linked to the firm and the family by personal ties, guarantees the good functioning and effectiveness of the BoD of the family firm. This is thanks mainly to the contribution that the outsider directors bring both in terms of skills and experience in the context of decisional processes, both in terms of a more detached vision of family problems. In such a context, and upon the condition that this is appropriately structured, the BoD can become a useful governing instrument of the family firm system. To avoid contrasts, a good BoD must be made up in large part by non-executive and independent administrators, who must take on role of real support to the CEO (President and/or Managing Director).

Other bodies may be constituted in a non official manner. A good example is the family council (consiglio di famiglia) which is usually composed both of partners and non-partners and meets each time it is necessary to discuss and/or solve problems regarding the owner family and relations between the family and the business. The family council manages tensions and potential family conflicts, it chooses the family members who may become a part of the Board of Administrators, it informs the family members of the business performance, and enables all actions necessary for the safeguard and development of the estates both of the firm and of the family and potentially even those of individual family members. The family council acts as a support for the formation of a responsible estate (proprieta'), allows a gradual rapprochement of the family members to the firm and it contributes to strengthening the links between family partners and future partners. Among its main tasks, one of the functions of the family council is that of acting as the real interface with the Board of Directors, exchanging with it information and reports on business performance and constructively dialoguing with it on the definition of the most appropriate strategies and policies for the firm.

#### CONCLUSION

The new competitive challenges and the necessity of improving relations with stakeholders, force family firms to invest in the system of governance. This means the establishment, alongside the entrepreneur, of a Board of Directors which will carry out a much more active role in the planning, control and relations with stakeholders; in particular the presence on the board of external members (Independent Administrators) becomes extremely important. If it is true that a good system of governance is not in and of itself a sufficient condition for the survival of the family firm, in the sense that corporate governance per se cannot guarantee a performance superior to the competition, an effective system of governance does increase the chances that successful strategic decisions be elaborated, planned and implemented. In other words, a necessary requirement common to family firms, is the introduction of an effective structure of governance which may redefine the roles and contributions that the various subjects bring to the firm, with particular reference to the roles of members of the family itself.

In a firm characterised by a lack of clear and defining rules, the adoption of a suitable model of governance can lead to significant modifications which guarantee greater transparency, careful business planning, and awareness of the need for growth. The codification of behaviours avoids the confusion that may arise from an unclear separation between the needs of the family and the business, namely the making of decisions which favour the former at the expense of the latter, business-focused, needs.

A good system of corporate governance also allows family firms to overcome problems related to generational turnover more easily. In fact, the existence of adequate governing bodies represents a guarantee that the business can look to the future irrespective of its founder. Furthermore, to grow and develop, every family firm must be able to attract private capital, and in order to do so make the transition from family management to family control, leaving the management to professionals external to the family group, but nonetheless maintaining the majority of the ownership rights. This process is made easier the more the family business provides itself with a system of governance which is both transparent and effective, able to guarantee the mediation between the diverging interests of owners and managers.

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# CREATIVE INDUSTRY: AN OVERVIEW OF THE STATE OF MICHOACÁN, MÉXICO

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## ABSTRACT

Creativity refers to the formulation of new ideas and the application of these ideas to produce original works of art, cultural products, functional creations, scientific inventions and technological innovations. Creativity is found in all societies and countries large or small, advanced or developing. The creativity, is observed in the way it promotes economic growth, contributes to entrepeneur-ship, fosters innovation, and enhances productivity. Despite the importance of the creative industries, the studies related in Michoacán are quite scarce. The aim of this paper is to provide an overview of the creative industries in Michoacán, México.

#### JEL CLASSIFICATION: L8,L89,Z10.

KEYWORDS: Creative Industies, Third Sector, Productivity.

## **INTRODUCTION**

The creative industry offers unique opportunities for economic growth and human development. In the same way, it can foster the development of trade and employment generation, investment opportunities for entrepreneurs, in particular for small and medium enterprises, powering all sectors of society. Studies related to the creative industries in Michoacán are scarce. The aim of this paper is to provide an introductory overview of the creative industry in Michoacán. This paper has focused on basic theoretical aspects starting with the definition, classification and methodology of creative industries given by The United Nations Conference on Trade and Development UNCTAD, ending with the analysis of the current state of the creative industries in México and Michoacán.

#### Creativity, Creative Economy And Creative Industries.

Creativity refers to the formulation of new ideas and the application of these ideas to produce original works of art, cultural products, functional creations, scientific inventions and technological innovations. The creative economy is an evolving concept based on creative assets, it can foster income generation, job creation and export earnings while promoting social inclusion, cultural diversity and human development acording to UNCTAD (2008). Howkins (2007), says creativity is not necessarily an economic activity, but can be, when the results of the creative process is an idea with economic implications or a marketable product. The Creative Economy is therefore, a holistic concept dealing with complex interactions between culture, economics and technology in the contemporary globalized world that is dominated by symbols, texts, sounds and images, and the scope of the creative economy is determined. UNCTAD proposes for the creative industries this definition, classification and methodological tool based on statistics and a classification of trade goods and services of the creative industries.

*Definition:* Cycles of creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs.

#### **Classification**

Creative Industries.					
Heritage	Arts	Media	<b>Functional Creations</b>		
- Cultural sites. Archaeologial sites, museums, libraries, exhibitions, etc. -Traditional cultural expressions. Art crafts, festivals and celebrations.	<ul> <li>Visual arts.</li> <li>Paintings, sculptures, photography and antiques.</li> <li>Performing arts.</li> <li>Live music, theatre, dance, opera, circus, puppetry, etc.</li> </ul>	<ul> <li>-Publishing and printed media. Books, press and other Publications.</li> <li>- Audiovisual. Film, televisión, radio, other broadcasting.</li> <li>- Desing. Interior, Graphics, fashion, jewellery and toys.</li> <li>- New media. Software, video games, digitized creative content.</li> </ul>	- Creative services. Architectural, advertising, creative R&D, cultural & recreacional.		

Source: Self elaboration using as reference the classification of creative industries UNCTAD (2010)

According to this classification, the creative industries comprise four large groups, taking into account their distinct characteristics. These groups, which are heritage, arts, media and functional creations, are described below:

- Heritage. Cultural heritage is identified as the origin of all forms of arts and the soul of cultural and creative industries. It is the starting point of this classification. It is heritage that brings together cultural aspects from the historical, anthropological, ethnic, aesthetic and societal viewpoints, influences creativity and is the origin of a number of heritage goods and services as well as cultural activities.
- Arts. This group includes creative industries based purely on art and culture. Artwork is inspired by heritage, identity values and symbolic meaning.
- Media. This group produces creative content with the purpose of communicating with large audiences.
- Functional creations. This group comprises more demand-driven and services-oriented industries creating goods and services with functional purposes.

#### METHODOLOGY

UNCTAD presents a methodological tool based on statistics and a classification of trade goods and services of the creative industries. This methodology helps the countries with the organization of their framework for cultural statistics. It is important to recognize that there is a considerable gap in the availability of statistics relating to the creative industrie due to the differences in the taxonomies and categories used for collection and analysis and in the faster economic change that has occurred the last century, particularly with respect to areas based on technological change. It is for these reasons that the creative economy is invisible when one looks at national statistical tables. This is a problem shared for many countries.

The UNCTAD classification emphasizes the undiscovered creativity of the southern countries by providing elements to identify potentialities. This methodology helps classifying the creative industries of several countries and influences the policy approaches that countries take to creative industries.

Methodologic	al tool based on statistics and a clas	sification of trade goods and services of t		
Heritage	Arts	Media	Functional Creations	
I. Art Crafts	II. Performing arts.	IV. Publishing and printed		
Art crafts,	Music (CD, tape)	media.	Architecture	
Celebration	Printed music	Books	Fashion	
Paperware	Musical instrument	Newspaper	Interior	
Yarn		Other printed material	Glassware	
		Printing machinery	Jewellery	
			Toys	
	III. Visual arts.	V. Audiovisual.	VII. New media.	
	Antiques	Film	Recorded media	
	Paintings	Audio-visuals	Video games	
	Sculpture	Post-production equipment	Computer equipment	
	Photography	Broadcasting equipment	1 1 1	

Source: Self elaboration using as reference the classification of creative industries UNCTAD (2010)

#### Creative Industries In México And Michoacán.

According to research conducted in the web sites of national and state government, there are not enough elements to affirm that México or Michoacán state are using the UNCTAD classification and methodology. However in Michoacán exists The Cultural Development Law. The Law's 5th Article, paragraph XVII states that the government should promote with relevant bodies the recognition of micro, small and medium enterprises and cultural creative industries, so that they can be subject to mechanisms of economic development and fiscal stimulus. It could not be found any information in the government web sites about programs which may promote what the law states. Despite the above, the tertiary economic sector in Michoacán (trade, tourism and services, where creative industries are focused) contributes in a greater percentage in the net income gross and employs 62% of the total economically active population, hence the importance of paying special attention and recognition of the creative industries in the state.

#### CONCLUSION

Despite the benefits that brings the creative industry and despite the efforts of organizations such as UNCTAD to recognize and classify the creative industry, México and Michoacán have not applied any sort of methodology to identify and separate the production data from creative industry from other industries and especially to identify the cost of production and the cost of creativity in the net value of the products and services offered in the creative industry. There could not be found any government support to develop the creative industry in the official web sites.

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# MERCANTILISM, GLOBALIZATION, UNETHICAL PRACTICES, CORRUPTION: A CASE STUDY OF THE RELATIONSHIP BETWEEN THE ENGLISH EAST INDIA COMPANY AND THE MONARCHY IN THE CONTEXT OF COLLABORATIONS IN THE SLAVE TRADE AND OTHER COMMERCIAL ACTIVITIES IN THE SEVENTEENTH CENTURY

Alan Parkinson, University College London Lynsie Chew, University College London

#### ABSTRACT

This paper examines the nature and operation of the relationship between the English East India Company (EIC) and the English Monarchy in the seventeenth century, a relationship based on bribery and corruption in the pursuit of mutually beneficial financial interests. Its focus is the acquisition of rights to participate in commodity imports and exports in general, and specifically the slave trade through the links between the EIC and the Royal African Company, a slaving company owned by the Stuart Royal family. A particular feature is the pivotal role of Sir Josiah Child, prominent in EIC governance, in forging relationships with the Monarchy for personal gain, both financial and political. This involved off-balance sheet financing and shrewd management of the resources of sailing ships, assets being worked to capacity to provide payback and gain. Such activities occurred under the guise of mercantilism – free trade, in an early form of globalization. The study reveals that many features of the reality of modern-day globalization and financial pressures and temptations exited four hundred years ago The methodology involves research of primary and secondary sources. It goes beyond traditional research primarily concerned with the study of a company's history and financial and trading-related facts and figures, by examining selected aspects of relationships between, and consequences for, the particular parties involved in joint ventures. This extends the scope of the paper across the boundaries of national studies into comparative, regional and transnational history, connecting with social studies in the broader sense.

KEY WORDS: joint ventures; management history; slave trade; globalization; mercantilism

# INTRODUCTION AND CONTEXT

The seventeenth century witnessed a growth in trade and economic prosperity which saw England emerge from its status as a commercial and industrial minnow to the richest country in Europe in the early eighteenth century (Allen, 2004). (Note: *England* is used in this paper as the term for the *British State* which was subject to change during the period studied). This emergence is all the more remarkable given the trade crises of 1614-17, 1621-24, and 1640-42, and the disruptions caused by the conflicts of the Civil Wars in the 1640s. The early part of the century saw sporadic growth, interspersed by periods of trade surges, with the immediate post-Restoration period witnessing a remarkable positive change in the economic prosperity of England. Of significant influence in this change in fortunes was the nature and scale of activities of the English East India Company (EIC); in particular its global activities, its involvement in the slave trade, and its relationship with the monarchy. This paper tells the story of those aspects, and focuses in particular on the role of Sir Josiah Child as a governing member of EIC. The EIC mirrored the changes in the economic landscape. By the latter half of the seventeenth century the

Company had grown to be the pre-eminent corporation in England, reaping vast profits, distributing substantial dividends to shareholders, acting as a major creditor and benefactor to the monarchy, and controlling the trade channels with the East Indies, whilst having vested interests in trading channels with Africa and the American colonies (Stern, 2009; Lawson, 1993).

#### The EIC and Mercantilisim

During the period 1660-1688, the EIC's trade was trade was conducted within a framework of the theory of Mercantilism (Mun, 1664). This theory espoused the notion that government control of foreign trade was essential to ensure a favourable balance of payments. It reflected a widely-held view that all the wealth of the world was limited and a nation could only grow its economic position by gaining from other nations. The accepted mechanisms for implementing mercantilism included protectionism, tariffs, monopoly of markets, exclusive trade with colonies, restrictions on the export of gold and silver bullion, and the prohibition of goods being transported by foreign ships. Mercantilism created an environment which, as will be demonstrated later, enabled both England and the EIC to prosper. Despite eighteenth century criticisms of the theory, it was not until the latter half of the nineteenth century that the British Empire abandoned it and embraced free trade.

Established on New Year's Eve 1600, the EIC was originally titled *The Governor and Company of Merchants of London Trading into the East Indies*. It adopted a governance structure now commonplace in the twenty-first century corporation with a Court of Directors (the Board) reporting to a Court of Proprietors (shareholders). Its charter from Elizabeth 1, renewed on an indefinite basis by James 1 in 1609, gave permission to trade for spices, silks and related items (Gardner, 1972).

The company obtained footholds in India in the Mughal Empire, and a fort (factory) was built in Surat in 1612. Further locations were gained in parts of what is now Malaysia and Indonesia. Profits were variable as the Company discovered that traditional English products of wool and broadcloth were not wanted by Asian traders. This led ultimately to the use of gold and silver bullion being traded for cottons, calicoes and peppers, in addition to silks and spices. The first steps towards a form of globalization had been taken. Competition with Dutch and Portuguese rivals remained fierce, including a massacre by the Dutch of English traders at Amboina in Indonesia in 1623. This prompted the Company to focus on the mainland of India. A major fort was established at Madras in 1640, and by 1647 it had 23 factories in India. The immediate post-Civil Wars era saw the EIC's fortunes suffer. This was due partially to the Company. The restoration of Charles II saw an upturn in the fortunes of the Company, due in part to the lobbying of powerful groups of interested parties, and in part to the perennial need of the King for additional sources of revenues. New Charters and Navigation Acts reflecting forms of protectionism saw exponential increases in the fortunes of the Company.

The marriage of Charles to Catherine of Braganza brought with it the ceding of Bombay (now Mumbai) where the Company already had a factory, and the rights to trade in a number of Portuguese locations around south-east Asia. The intertwined financial, political and religious challenges facing Charles in the mid to late 1670s and early 1680s saw the King seeking new and ever changing allegiances and alliances, and the fortunes of the Company swayed with the King's movements. The accession of his brother James 11, formerly the Duke of York, brought with it a trade climate providing more certainty to the Company; its recent expansion into political governance and power in India achieved solid foundations, and profits flowed with greater strength. The EIC embarked on a number of monopolistic abuses, and a number of its Officers became involved in corruption, bribery and fraud. The return of Charles II in 1660 heralded opportunities which the company took full advantage of, with consequential benefits for the company itself, Charles, and subsequently James II, and England as a nation. It assumed a pro-active and pre-eminent role within a set of collaborative lobbying ventures unifying parties interested in trade expansion.

Perhaps more significantly it employed financial mechanisms to influence Charles on a more personal level. Both resulted in the acquisition of further trading rights and a protected monopolistic position.

#### Liaisons With Royalty And Resultant Trade Dominance

The immediate pre-Restoration period saw an injection of £370,000 of additional capital, placing the EIC in a strong financial position but a competitive trading environment, compounded by Dutch trading strength reinforced by aggression, limited opportunities for trade expansion (Wilson, 1968). This was a situation shared with English merchants in general, and individually and collectively they began lobbying Charles for action upon his return (Ogg, 1972). Charles proved remarkably amenable to such lobbying, partially due to a need for political international positioning, and partially for financial reasons, reasons due in no small way to both of Parliament's failure to provide an adequate annual grant settlement, and the King's extravagant lifestyle (Sherman, 1976).

The situation facing English traders and merchants in 1660 had three core fronts: i) Dutch rivalry, aggression and dominance; ii) hostile actions against English ships by a number of European nations, and particularly so in the Caribbean; and iii) English colonists buying goods and supplies direct from rival European nations (Sherman *ibid*). The continuing advocacy of mercantilism engendered deep rooted worries. The belief that the world's wealth was limited and that one nation prospered only at the expense of others led to vociferous demands for protective action. These demands reflected concerns within the Stuart royal family itself given its significant interests and investments in the slave and fur trades. Petitions were submitted with energy and urgency to the King. (Illustratively, evidence of petitions may be located in Great Britain. Public Records Office. Colonial Office. Board of Trade, Commercial. Entry Books, Vo. 1, C.O. 389/1, fols. 31-33, 44-51, 54-56, 58-64).

The Earl of Clarendon, Charles Chief Adviser, comments: *(he) manifested a very great desire to improve the general taffik and trade of the kingdom, and upon all occasions conferred with the most active merchants upon it, and offered all that he could contribute to the advancement thereof* (Tourneisen, 1798). Charles enacted this desire by establishing, in November 1660, a new Council of Trade to advise himself and his Privy Council on matters concerning the regulation of trade. The four month period during which the Council was formulated and implemented reflects the significance Charles II placed upon trade matters. This was followed in the following month by a new Navigation Act, allowing only English and colonial ships to carry key goods. It added the proviso that specified articles such as cotton, sugar, wool, indigo and tobacco could only be consumed within the empire, thus promoting self-sufficiency and reducing England's reliance on foreign imports.

This Act did not restrict the rights of colonials to import from elsewhere other than England and/or export to non-empire countries (Jensen, 1962). Subsequent merchant lobbying led to the passing of the Navigation Act of 1663 (referred to as the Staple Act), requiring all supplies for the colonies to be transported through English ports, benefiting English traders and merchants. From England's national perspective it had the additional benefit of preventing colonials from using lower-cost Dutch ships, thus damaging the Dutch economy (Bulut, 2003). Also in 1663, the Government sanctioned the export of bullion and foreign currency, thus enabling traders to use more desirable tools of exchange in regions where traditional English goods were not in demand (Sherman *ibid* 332). The prospects for the English economy were improving. The transition from 'also ran' in 1660 to prominence by 1700 had its roots in this initial reaction by Charles II, followed by series of further government policy decisions. Many of the decisions focussed on anti-Dutch commercial and foreign policy, seeking to undermine the fierce competition. The initiatives of 1660 required further concerted efforts on the part of lobbyists to influence policy, and the Company was pre-eminent in this group, seeking to ensure it obtained concessions favouring itself (Sherman *ibid* 332).

## Alliances in partnership, factions in co-factions

Lobbying by the Company was not new. Throughout the seventeenth century, before and after Charles II, the company had sponsored pamphlets outlining the challenges it faced, suggesting responses, and the benefits to the nation of a more prosperous Company (illustratively, Roberts, 1641; Robinson, 1641; Child, 1693). The Company's management and supporters recognised that its position in 1660 was tenuous and if it were to survive – let alone prosper, it needed government help. The requisite help was forthcoming, facilitating not just survival but generating significant profits. By 1672, the incoming Governor of the Company, Sir John Banks, found himself overseeing the activities of the 'richest and most powerful mercantile corporation in England' (Coleman, 1963: 58). This position resulted from the successful implementation of two deliberate, well designed strategies: the gaining of representation on government councils and of seats in Parliament and, and the making of loans and financial gifts to the King (Sherman *ibid*: 335) The former ensured direct representation and influence on commercial policy decisions; the latter took advantage of the King's perennial avarice for money, and enabled personal influence to secure concessions. As a consequence, the improvement in the EIC's prosperity and the direction and content of English trade and foreign policy marched side by side. EIC representation on the newly formed Council of Trade and its derivative sub-committees was, to say the least, voluminous, despite the King's original intentions for its composition to reflect a cross-section of England's trading and merchant communities (Letters from the King and Council, IX, 1660-1664. Item 5, fol. 4a and b).

The Council comprised sixty-three members, including fourteen who were appointed in their capacity as peers and for cosmetic purposes and played little part in the formulation of policy (Sherman *ibid*: 339). Of the remaining forty-nine active members, the Company had representation through eight of its current employees (including both its Governor and Deputy-Governor), augmented by a further twenty-one members who had a range of commercial and financial ties with the Company. Of those twenty-one, two had been EIC officers in the 1650s and four more became officers by 1663 (Henning, 1983). Thus over 50% of the Council had EIC affiliations and over 25% had either been or were Company officers. It is perhaps not surprising that seven major petitions and/or remonstrances were made in the first month of the Council's existence and granted (Sainsbury 1922:32), providing trade protection and contributing towards enhanced profitability. The representation on the Council aided the degree of influence, but laws were passed by Parliament. It thus assumes significance that thirteen of the EIC-connected Council members were also MPs in the Parliament.

As the decade progressed, the close ties, inter and intra, between the Council, Parliament and the Company continued and, indeed, strengthened. The composition of the forty-six Council members in 1668 was made up of twenty-one peers – there, as before for political and cosmetic reasons, and twenty-five lay members. Of those twenty-five, sixteen were linked with the Company thus holding a considerable degree of influence over the policies formulated and agreed by the Council. Statistically, the Company was represented in one way or another by 41% of the entire Council, and by 64% of the more active members (Sherman *ibid*: 341).

In light of the foregoing, there should be little surprise that the Company prospered as it did in during the 1660s. As referred to earlier, however, connections and allies were also needed in Parliament. Computer analyses of records (Sherman *ibid*: 342).reveal that between 1660 and 1663, at any one time between 19% and 23% of its officers sat as MPs in the House of Commons. The volume of representation was harnessed by key political allies and supporters of the Company, allies and supporters with, invariably, financial interest. Upon his return, Parliament had voted Charles 50% of all indirect excises and he used a variety of allies to collect and, where necessary apply those taxes, known as 'farming' (O'Brien, 2002: 33-37). This was of great value to Charles and he relied upon the fidelity of his 'tax farmers'. Key amongst those were Sir John Shaw and Sir George Downing; and both happened to have financial and commercial interest in the Company. Shaw faced problems with the Dutch concerning his African trade

and backed Company moves against the Dutch, also reflecting a role he played as a tax farmer on behalf of the Company.

Downing was virulently anti-Dutch and was England's trade representative at The Hague. This influential position proved to be to the Company's advantage when he was given the right to also represent and, indeed, act with power of attorney for the EIC there. As with other Company-related MPs, Shaw and Downing sat on a number of key Parliamentary committees, including those associated very specifically with the wool trade and the Navigation acts (Sherman *ibid*: 341). Indeed, the 1660 Navigation Act emerged from the deliberations of a committee of which 27% were 'Company men'. In the immediate post-Restoration period, the Company had found ways of ensuring its aims were reflected in emerging trade commercial policy; the Company was well represented and its needs and wishes well attended to, an outcome doubtlessly linked to the financial gifts and loans made by the Company to the king or his acolytes. The return of Charles witnessed contentious discussions with Parliament concerning the Royal finances. Many MPs at the time of the Restoration were fearful that a generous financial provision would result in an independent monarchy, accompanied by a standing army, with echoes of the King's father's activities and consequences in the 1640s (Coward, 2003: 286). The sum calculated for the annual needs of the monarch was £1,200,000, but that full sum was never paid (Chandaman, 1975: 196-202).

This excluded the sum of £550,000 that Charles had paid in settlement of his exile period debts, and debts originally owed by his father. The final settlement fell short by £425,000 and Parliament granted Charles excise duties on alcohol for life, but it was barely £100,000. By the end of 1660, the monarchy had debts of £925,000 and received £300,000 less than the specified £1,200,000. This was compounded by Charles' decision to maintain a standing army garrison at Tangier – significantly not in England, at an annual cost of £140,000 (Childs, 1976: 47). Charles was unable to raise money through taxation without Parliament's approval, action that was not feasible, and with annual income challenges the notion of long term credit loans was, in the main, not tenable. Charles was thus in a position which, to say the least, made him financially vulnerable and enthusiastic to participate in arrangements which might alleviate that vulnerability. Contextually, Parliament's stance accentuated Charles' subsequent propensity to enter into questionable financial arrangements, whilst, paradoxically, also serving to weaken its financial hold over him (Miller, 1982: 4).

Charles obtained loans and gifts from many sources, not least from the EIC. The Company's lobbying paid dividends, in more ways than the obvious: the Company's Charter was renewed in 1663. Between 1660 and 1688, the Company experienced an economic boom, at least on the surface. Between the Restoration and 1688, the Company, usually with the explicit backing of the monarchy, complete a total of 404 voyages to the East Indies (Furbur, 1997: 91). The cargoes included the traditional cloths of cotton and silk, but the entrepreneurial endeavours of Company officers now included expansion into coffee and tea, and saltpetre. The established bases at Surat and Madras, the new port of Bombay, new liaisons with Bengal, all contributed to record levels of trade. 1664 saw imports into England of two hundred and fifty thousand bales of cloth, imports which contributed to the fashionable clothing styles favoured by the Restoration court and the tastes of those following the Royal fashion agenda. By 1684, cloth imports to the clothing industry in England and to the balance of trade through re-exports to the new colonies and European countries.

The Company's reliance on cloth trade was emphasised by this level of activity amounting to 83% of its total trade. 1680s witnessed a new high in the Company's share price of £300. (The share price had been £65 in 1664, had grown to £245 in 1680.) Dividends also surged. In the 1670s, dividends averaged 20% of profits, but in 1680 reached a then high of 50%, with this level repeated again in each 1682, 1689, and 1691. Between 1657 and the late 1680s, shareholders received returns in cash dividends alone totalling 840% of their investments. Following Charles' sanction of bullion exports, the Company continued to

export increasing amounts as trade grew. Between 1681 and 1685, the Company's bullion exports exceeded 240 tonnes of silver. Many of the bullion export critics were silenced, as these exports were shown to stimulate the economy of India, through employment, output, and exports to England, and re-exports from England to elsewhere.

The death of Charles and the accession of James saw Royal patronage not only maintained but, through both marriage and financial arrangements, increase. The backing by James of the EIC Governor, Josiah Child, saw an aggressive expansion in India. The figures quoted above represent peaks, highs, and are, in mathematical terms, absolute rather than relative. They hide the reality of the troughs experienced from time to time through depressions and wars, and the challenges to the Company and the Nation. One such trough occurred during the Second Anglo-Dutch War in 1667. The first had been in 1663 but had not lasted long enough to have a serious impact on the Company's activities. Then, trade imports and exports ground almost to a halt. In 1672, Charles used what he perceived as his Royal prerogative to suspend his interest payments due on loans, causing consternation amongst his many creditors, including the EIC as a corporation, and merchants and gentry who required income to maintain their lifestyles. Immediately afterwards, the effects of the on-going Franco-Dutch war were felt, with concern about what would happen to imports and exports in a volatile European climate. Such concern is evidenced by a communication from the Directors in London to the Officers in Madras: 'Europe being so filled with all sorts of goods from your parts and you so full of Europe commodities, we would have you forebeare to provide any of the said commodities. (Danvers and Foster, 1902). The surge in bullion exports in the early 1680s is at odds with the reality of trade. Further communications between London and India suggest that it was move by the Company not to finance extra trade necessarily, but, rather to manage interest rates in India through differential values in exchange rates. (Danvers and Foster *ibid*).

There was a decline, although temporary, in activity in 1683. This was caused by a credit crisis in the City of London and panic amongst creditors to many companies. The EIC held large sums of short-term loans from the public and was forced to repay them. The sense of anger and concern expressed against many companies – but particularly the EIC given its propensity to continue to export large quantities of bullion, forced the Directors to suspend bullion exports until all immediate debts had been paid. Thus, the figures quoted earlier hide what was, in reality, a turbulent passage over time. More turbulence was to churn the not always so calm waters, following the transition from James to William and Mary in the Glorious Revolution of 1688.

#### Peaks And Troughs: The Role Of Sir Josiah Childs And The Atlantic Slave Trade

Josiah Child was pivotal in the increase in the fortunes of the Company, blending strategic skills with opportunism. He had a history of entrepreneurship. He supplied food as a victualler to the Nay under first Oliver Cromwell and then Charles II, and grew very rich. He was instrumental in founding the Royal African Company, helping it to acquire its Charter for monopoly of the slave trade. He used his ever increasing wealth to acquire shareholdings in the EIC. Between 1671 and 1679 his stock increased from 2% to him becoming the largest shareholder. Throughout the 1680s he was either Governor or Deputy Governor. When not holding these offices, his shareholding ensured his wishes were heard, and acted upon. He was a fierce advocate of the Company's expansionist policies and published his views on trade and business models.

His presence in the London Stock Exchange was formidable; he bought and sold shares for other as well as himself. Daniel Defoe (Defoe, 1700 reprinted 2000: 243) articulated the view that he was well versed in the art of misrepresentation of facts with a view to manipulating the share price of the EIC: *'there are those who tell us, letters had been order'd by private management to be written from the East Indies with an account of the loss of ships which have been arrived there, and the arrival of ships lost; of war with the Great Mogul, when they have been in perfect tranquillity, and of peace with the Great Mogul when he* 

has come down against the factory of Bengal with 100,000 men, just as it was thought proper to call those rumours for raising and falling of the stock and when it was for this purpose to buy cheap and sell dear.' Child's views on the generation of profit focussed on monopoly as the primary source of amassing wealth both for the individual and for the nation. He also embraced the notion of profit from the slave trade: not just in the East Indies but also within the Atlantic triangular route. It was through this mechanism, and his close links with James, Duke of York (later James 11) as head of the Royal African Company (RAC) The notions of the slave trade heading from Africa west across the Atlantic, and trading companies heading east to India and China is well established in the psyche of the generalist reader of history. Harms (2002: 92) makes a specific and telling, point:

'While many are aware of the 'triangular' slave trade between Europe, Africa, and the Americas in the 18th century, few people realize that Asian-European trade was also instrumental in sustaining the exchange of human slaves. For example, French ships taking European goods to Asia returned with cowry shells and Indian textiles valued by West Africans. On the African coast, traders exchanged these Asian products for slaves who, in turn, were sent to France's New World colonies. The circle was completed when sugar and other goods from the Americas were loaded on board and shipped back to France. The Asian-European trading relationship, as a fundamental step in the African slave trade, thus played a crucial role in the development of an integrated global economy in the early modern era'.

Bringing matters to a more localised arena, Murphy (1999) use the English East India Company as a focus of a significant dimension to Harms' point:

'Although the (English) East India Company was not itself engaged in the transatlantic slave trade, the link was very close and highly profitable.'

The Atlantic slave trade was in fact, and without being revealed in the accounts, a vital contributor to the financial strength of the English East India Trading Company. The mechanism for this subterfuge involved a close relationship between that Company and the Royal African Company. Kitson (1999) records the RAC's roots in the foundation of a slaving company by the Stuart Royal family in 1660, under the direction of James, Duke of York, Charles II's brother and the future James II. It was granted a monopoly under Royal Charter. Slaves had either the initials 'RAC' or 'DY' (*Duke of York*) branded on their chests. Between 1672 and 1689 it transported between 90-100,000 slaves from West Africa to the Caribbean – and East India Trading Company ships were utilised on many journeys.

The link was Sir Josiah Child, a founding member of the RAC. In 1671, he became a shareholder in the EIC and by 1679 he was the largest EIC shareholder (Robins, 2006). Between 1674 and 1699, the year of his death, he was an EIC Board member; indeed, he was either governor (chairman) or deputy-governor throughout the 1680s. The duality of the two positions was realized through the awarding of contracts by the RAC to the EIC for the carriage of cargoes, including those other than textiles: slaves. Davies (1999) reports that, as a consequence, the ports of Liverpool and Bristol in particular were to see the comings and goings of EIC ships to and fro across the Atlantic with the transportation of slaves from West Africa. The 'at a distance' involvement – acting as a third party carrier across the Atlantic - was not the sole engagement of the East India Trading Company.

A more 'hands on' engagement was also undertaken. Logan (1956) reports that whilst much research has taken place into the transport westwards from Africa to the Caribbean, transportation the other way, across the Indian Ocean to Asia, has received less attention. A significant number of slaves were transferred from Africa into Asia, particularly into India and south-west Asia. The East India Trading Company was a pro-active participant: 'Among the companies to engage in this traffic to the East, the British East India Company took an auspicious part. Thus while another English company, the Royal African, was busily transporting slaves westward into the then new lands of North America and the West

Indies, the East India Company was similarly occupied, although on a smaller scale, with shipping Madagascar slaves to India and the East Indies'.

Unlike the trade to the New World, where enslaved labour worked on sugar and cotton plantations, other motives were behind the transportation of the slaves from Madagascar. This 'hands on' engagement was connected with the establishment in 1686 by the East India Trading Company of a factory, York Fort, at Benkulen on Sumatra. The Company had originally transferred its England-based employees to York Fort but had become alarmed by the ill health suffered and deaths taking place due to the unfavourable climate and conditions. So alarmed was the company that correspondence between London and Benkulen referred to '*Englishmen being sent to their everlasting homes*' if sent to that '*fever infested island*' (Logan *ibid*). One option was to abandon York Fort but it was Company policy to retain a foothold on Sumatra to counter the activities of the Dutch.

Thus, the slaves were to be sent as direct replacements for English employees, English employees however, did more than work in the factory. Logan (*ibid*) identifies slaves being used in a victory of pragmatism over ideology, as armed quasi-soldiers, rather than chattels within the factory. Logan's examination of ship records and slave documentation at Your Fort indicates that some of the slaves on Sumatra had been transferred not from Madagascar but from Fort St. George, the company's location near Madras in India. This suggests that the Company may already have been involved in slaving from an earlier period.

The English East India Company was not alone in either the collaboration with the slave ships of other companies or its own activities. Harms (*ibid*) reports of the involvement of the French East India Company in the slave trade, emphasising its key role in forming what he terms 'a vital link in the trading system that connected the continents and formed the backbone of the global network of commerce'. As with the role of the East India Trading Company related earlier as a key cog in the slave trade, Harms contends that the popular view of slave trade routes being connected in a triangular fashion, linking the circuit of Africa, Europe and the Americas, is understandable but a fallacy; in fact it formed 'an essential bridge between Europe's New World trade and its Asia trade'.

# THIS PAPER IN REVIEW

The thrust of this paper has sought to show that trade, commerce and business in the seventeenth century reflected many of the characteristics witnessed in the twenty first century. The scale of West-East trade was tantamount to a form of globalization, contained within a framework of mercantilism, ensuring protectionism and tariffs worked to the advantage of the English Monarchy and the EIC shareholders. Where this involved co-operation and partnership, this was acceptable if profit was the result. Trading parties co-operated with each other on partnership terms, but also competed. The drivers of the necessities of survival and profit resulted in pragmatic collaboration, sometimes corruption, ensuring that money arrived in the pockets of the few, usually, particularly in the case of slaves and the colonies, at the expense of the many. This paper provides a foundation for further study in the area of archive documentation tracing and tracking the flows of profit and cash.

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## ABSTRACT

Monetary policy rate has remained a major potent monetary policy tool used by monetary authorities in setting targets and direction of other rates and in driving the movement of other macroeconomic aggregates in both developed and developing countries. In Nigeria however, the Central Bank has kept monetary policy rate stable at 12 percent between October 2011 and September 2012 but stability in MPR is hardly reflected in the movement short term and long term interest rates. The aim of this study is to use the multivariate Vector Autoregressive Model (VAR) to analyze the effects of MPR on other rates in Nigeria. The study makes use of monthly data from M1:2007 to M9: 2012 to evaluate the cause effect relationships between MPR and short term and long term rates in Nigeria. The choice of the scope of the study lies in examining the response of interest rates to monetary policy shock since the 2007-2008 global economic crises. Result obtained from this study will be used to track the relative effectiveness of monetary policy in an emerging market where money market instrument is not fully developed.

JEL: E4, E43, E52

KEYWORD: Monetary Policy, Monetary Policy Rates, Interest Rates.

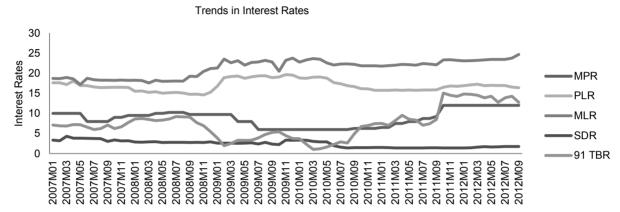
# **INTRODUCTION**

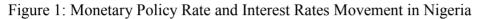
Two major policy instruments used by monetary authorities to influence the level and availability of credit in most developed and emerging market economies is fiscal policy and monetary policy. Of particular interest to the monetary authorities in developing economies is the issue of how monetary policy impacts on some selected macroeconomic target variables which inter alia, includes money supply, equilibrium money stock, interest rates, investment, savings and the level of Gross National Product (GDP). Although, the relative effectiveness of monetary policy in developing countries and emerging market economies has been less successful because of the unsophisticated nature of the money market in most of the economies. There is however, an increasing need to track the sensitivity of interest rates to changes in monetary policy target instrument-the monetary policy rates (MPR). Two decades ago, the empirical literature was heralded with conflicting views on the direction of causation on the monetary transmission mechanism. While prevailing theory such as the term structure of interest rate provides little guide to policy makers as to the size and persistence of the effects of monetary policy rates on short term and long term yields, the expectation hypothesis does not appear to do better in providing the linkage between monetary policy instrument and short term and long term interest rates.

The transmission of monetary policy action is often effected through interest change. Being a cost for borrowing and a reward for lending, the interest rate is an important economic variable which need to be guided so as to achieve economic stability. In a bid to ensure price and financial stability, the Central Bank of Nigeria (CBN) Monetary Policy Committee (MPC) adopted the Monetary Policy Rate (MPR) in place of Minimum Rediscount Rate (MRR) to controls the movement of market interest rate by benchmarking it against the MPR. Generally, a tight monetary policy tends to increase interest rate which impacts the economy by increasing the cost of borrowing and by so doing cut back on investment and the general price level. The reverse situation applies to an easy monetary policy but this may not be the actual behaviour of interest rate in practices. In the wake of the 2007-2008 global financial crises, the CBN reduced the MPR in an attempt to avert the global uncertainty of recession.

response of market interest rate to monetary policy actions as shown in the trend in figure 1 has left economic analyst with the profound question of the effectiveness of monetary policy in tracking other rates and target variables in Nigeria. To this end, this paper is designed to test the linkage between MPR and other market interest rate in Nigeria over the period 2007 to 2012. The choice of these periods is unique as it marks the period in which monetary authorities carried our several monetary policy actions to check economic recession and contagion from the external economic environment.

Following the introduction section, the rest of the paper will be structured into four sections. Section two reviews the empirical literature while section three deals with the methodology and data. In section four we present the empirical analysis while section five concludes the paper.





The figure shows monthly data of interest rate movement in Nigeria during the period 2007M1-2012M9. The fourth line from the top-right of the chart is the monetary policy rate. Between M1:2007 and M4:2009MPR was a lot stable averaging 5 per cent. Until M10:2011 there was a misalignment between MPR and all other rates. Of particular interest is the savings deposit rate which has remained very low since 2007. All rates however, showed a stable movement between 2011 and 2012 when MPR was fixed at 12 per cent.

# LITERATURE REVIEW

The process in which bank interest rates respond to changes in monetary policy rates is often referred to in the literature as interest rate pass-through process. This process is simply the rate or process at which official interest rate is transmitted to other interest rates (Rehman 2009; Kovanen, 2011). Generally, a weak and incomplete interest rate pass-through is an indication of an unhealthy financial system (Aydim, 2007) and the failure of monetary policy to stabilize macroeconomic shocks (Marotta, 2009).

There has been renewed interest in the issues of interest rate pass-through especially with regards to the link between monetary policy rate and short term and long term interest rate. Early studies on the subject matter includes; Cottarelli and Kourelis (1994); Heinemann and Schuler (2002); Mojon (2000); Toolsema, Strum and de Haan (2001); Donnay and Degryse (2001); Petro, McDermott and Tripe (2001); Weth (2002); and De Bondt (2005). The more recent studies on interest rate pass-through include; Hofrnann and Mizen (2004); Sander and Kleimeier (2004); Ghartey (2005); Sorensen and Werner (2006); Sorensen and Werner (2006); Liu, Margaritis and Tourani-Red (2008) Chen, (2009); Banerejee, Bystrov and Mizen (2010); Cas, Carrion-Menendez and Frantischek (2011) and Tia, Sek and Har (2012).

The conventional model for analyzing the effects of monetary policy rate on market rates is the Monti-Klein model (Monti 1971, Klein 1971). The Monti-Klein framework assumes that if markets are perfectly competitive then the interest rate pass-through will be full symmetrical and swift in response to monetary policy rate. The model assumes the absence of information asymmetry, switching cost and imperfect competition in financial markets and by so doing making the full pass-through a long run phenomenon while deviations from long run equilibrium occurs only in the short run. Although, the reality in most markets is that perfect market condition hardly exists as markets generally exist under conditions of imperfect market situations, high switching and menu cost and absence of perfect information. This notwithstanding, some studies have found the Monti-Klein model to be realistic and true in its assumptions. These studies which reflected changes in monetary policy rates in asymmetric and non-linear adjustment includes; Hofmann and Mizen (2004), and Fuertes and Heffernan (2009).

Almost all the studies in the empirical literature on the interest rate pass-through is centered on the investigation of the degree and speed of adjustment of banking rates to changes in money market rates however, with some degree of variability in terms of short term and long term adjustment of market rates to monetary policy rates. While some of the study concluded in their empirical analysis that interest rate pass-through is weak and incomplete (Kwapil and Scharler 2006; Aydim, 2007; Marotta, 2009; Kovanen 2011), others found interest rate pass-through to be weak in the short run but fully complete in the long run (Weth 2002). Yet, few studies found interest rate pass-through to be fully complete in the short (Crespo-Cuaresma, Egert, and Reininger 2004). Four major theories however exist in the literature to explain the inflexibility in interest rate in the short run. These theories include; the agency cost theory (Stiglitz and Weiss, 1981), the adjustment costs (Cottarelli and Kourelis, 1994), the switching costs (Klemperer, 1987) and the risk sharing cost (Fried and Howitt, 1980).

The more recent studies of interest rate pass-through have considered the impact of future money market rate on current retail rate setting with the central focus on the search for market efficiency (Bernoth and von Hagen, 2004). In the study conducted by Sander and Kleimerier (2006), it was found that there exists a greater response to anticipated monetary policy changes measures by interest rate features than to unanticipated changes. Other recent studies have gone beyond estimating the degree and speed of adjustment of market interest rates in relation to changes in monetary policy rates to examining the degree and variability of interest rate pass-through across countries and regions (Weth 2002; De Bondt 2005; Sorensen and Werner 2006; Sander and Kleimeier 2006; Banerjee, et al 2010; Cas. et al 2011). These studies shows the degree of interest rate pass-through differ across regions and across countries with common monetary union. Some studies have found the monetary transmission mechanism to be quick and efficient while other found the effect of monetary policy rate on market rates to be inconclusive.

The recent study carried out by Aziakpono, Wilson and Manuel (2007) and Aziakpono and Wilson (2010) attest to this fact. While Aziakpono, Wilson and Manuel (2007), found market interest rates to respond quickly to monetary policy rate, the study conducted by Aziakpono and Wilson (2010) found that commercial Banks lending rates are more rigid in response to positive shocks in monetary policy official rate in South Africa. In Nigeria, the Central Bank (CBN) Monetary Policy Council (MPC) which derives its legal backing from the various statutes of the bank (CBN Act 1958; Decree No. 3 1997; CBN Act 2007), adopted a new anchor for monetary policy action on December 11, 2006 with the ultimate goal of achieving stability in the domestic currency, prices and ultimate economic stability through interest rates stability around a benchmark called MPR. At inception, MPR was fixed at 10 per cent with a 600 basic spread point making a lower band of 7% and an upper band of 13% based on the current and expected inflation. Since inception, the MPR has been changed about fourteen times most of which was positive and are usually done in anticipation of a raise in the general price level. Adjustment of MPR by MPC has ranged from a decrease of 20% in the wake of the 2007-2008 global economic crisis to an approximately 30% increase in the period between the third quarter 2011 and the fourth quarter of 2011.

As shown in figure 2 (see Appendix 1) monetary policy rate (MPR) has remained constant between the third quarter of 2011 and the third quarter of 2012. Although at various periods of the change in MPR, market interest rates exhibited changes in different direction without correspondingly tracking changes in MPR. This according to Romer and Romer (2000) represents a puzzle to policy planners. Given that the

relative effectiveness of MPR in tracking other market rates has not been extensively studied in Nigeria, we explore this linkage for Nigeria.

#### DATA AND METHODOLOGY

#### Data Source

The data used for this study is monthly time series observations sources from the Central Bank of Nigeria Statistical Bulletin covering the periods 2007:M1 to 2012:M9. The choice of this period is unique given that it tracks the monetary policy action of the Central Bank in the wake of the global financial crisis of 2007-2008. The major variables used in the model include monetary policy rate (MPR), savings deposit rate (SDR), interbank rates (IBR), prime lending rate (PLR), maximum lending rate (MLR) and 91 day Treasury bill rate (TBR).

#### Theoretical Framework And Model Specification

The theoretical base for explaining the linkage between monetary policy rate and short term and long term and long term interest rates is the marginal cost pricing model also referred to as the monetary policy approach (de Bondt, 2005). Following the Monti-Klein framework (Monti 1971; Klein 1971) which assumes the existence a perfectly competitive market devoid of asymmetric information, transaction cost and menu cost, we assume price is equal to marginal cost. Under this condition, the derivative of price with respect to marginal cost will be unity. If this assumption of perfect competition is relaxed however, the derivative of price with respect to marginal cost becomes less than unity. Applying this framework to the relationship between money market rate and retail rates of interest we develop a simple model where;

$$BRR = f(MPR) \tag{3.1}$$

Where, BRR is bank retail rates which are in the form of short term interest rates (savings deposit rate (SDR), interbank rates (IBR), prime lending rate (PLR), maximum lending rate (MLR) and long term interest rates in the 91 day Treasury bill rate (TBR). MPR is the monetary policy rate usually set by the monetary policy council (MPC) in Nigeria.

In simple linear estimation form we can expresses equation (3.1) as;  $SDR_t = \alpha_0 + \alpha_1 MPR_t + U_t$ (3.2)

$$IBR_t = \beta_0 + \beta_1 MPR_t + U_t \tag{3.3}$$

$$PLR_t = \delta_0 + \delta_1 MPR_t + U_t \tag{3.4}$$

$$MLR_t = \phi_0 + \phi_1 MPR_t + U_t \tag{3.5}$$

$$TBR_t = \lambda_0 + \lambda_1 MPR_t + U_t \tag{3.6}$$

Where; MPR, monetary policy rate is assumed a proxy for marginal cost price. Parameters  $\alpha_1, \beta_1, \delta_1, \phi_1$  and  $\lambda_1$  are the coefficient of the pass-through rates, while the parameters  $\alpha_0, \beta_0, \delta_0, \phi_0$  and  $\lambda_0$  are the constant terms. If the coefficient of the pass-through rate is unity, the

transmission of monetary policy rate to other market rates is said to be complete and efficient. However, if the coefficient of the pass through rate is such that it lies between zero and unity, the monetary transmission mechanism is said to be incomplete and inefficient.

To establish the direction of casualty and interdependence between monetary policy rate and other retail rates, we adopt the Vector Autoregressive (VAR) methodology. This methodology is explained in a simplified form if we assume a n x 1 vector composed of banking retail rates (Y), we can explain the

VAR as a model that relates current values of  $Y_t$  to past values of  $Y_t$  and a  $n \times 1$  vector of innovation  $U_t$ . This can be expressed simply as;

$$Y_{t} = \alpha + \phi_{1}Y_{t-1} + \dots + \phi_{p}Y_{t-p} + U_{t}$$
(3.7)

Where;  $\alpha$  is a nx1 vector and  $\phi_j$ 's are nxn matrices.  $U_t$  is a nx1 vector of serially uncorrelated random variables with zero mean and a covariance matrix  $\Omega$ . The VAR model can be expressed explicitly as;

$$BRR_{t} = \alpha_{1} + \sum_{t=1}^{n} \alpha_{11} BRR_{t-1} + \sum_{t=1}^{n} \alpha_{12} MPR_{t-1} + U_{t}$$
(3.8)

$$MPR_{t} = \alpha_{2} + \sum_{t=1}^{n} \alpha_{21} MPR_{t-1} + \sum_{t=1}^{n} \alpha_{22} BRR_{t-1} + V_{t}$$
(3.9)

Where; BRR is banking or market rates of interest in the form of savings deposit rate, interbank rates, prime lending rate, maximum lending rate and the 91 day Treasury bill rate. MPR is the monetary policy rate while  $U_t$  and  $V_t$  are the uncorrelated error term.

To estimate the impulse response and variance decomposition of monetary policy rate and market rates, we assume that the innovations  $U_t = (U_t \text{ and } V_t)$  are functions of some fundamental shocks  $\in_t$ : such that:

$$U_t = \psi_{\cdot} \in_t \tag{3.10}$$

Where;  $\in_t \sim iidN(0, \Omega)$ . These fundamental shocks represent unanticipated deviations of the Central Bank from its monetary policy rule usually termed as monetary policy shocks. To estimate the matrix  $\psi^*$  in equation 3.10, we assume that  $\psi^*$  is the lower triangle in the 2 x 2 matrix in equation 3.11.

$$\begin{bmatrix} U_{1,t} \\ U_{2,t} \end{bmatrix} = \begin{bmatrix} y & 0 \\ y & y \end{bmatrix} \begin{bmatrix} \epsilon_{1,t} \\ \epsilon_{2,t} \end{bmatrix}$$
(3.11)

From the ordering in equation 3.11, the innovation,  $Y_{1,t}, U_{i,t}$  are not affected by the shocks  $\in_{2,t}$  but innovation  $U_{2,t}$  is affected by the shock  $\in_{i,t}$ . We can interpret one of the  $\in_t$ 's as monetary policy shock and we are interested in finding out how this monetary policy shocks affects other retail rates of interest.

To establish the transmission mechanism between monetary policy rates and short term and long term interest rates, we use the Granger causality test. Usually, the null hypothesis is rejected if the observed F-Statistics exceeds the critical F-values at the usual 1 percent, 5 percent or 10 percent levels of significance.

#### **EMPIRICAL ANALYSIS**

The result of the effects of monetary policy rate (MPR) on interest rates in Nigeria is summarized in Table 1 and 2. While Table 1, shows the result of the model without considering the stationarity properties of the variables, Table 2, shows the result of the regression estimate with a consideration of the unit root properties of the variables. Both results reported in Table 1 and 2 compares the results between the response of short term rates (savings deposit rate, interbank lending rate, prime lending rate and maximum lending rate) and long term rate (91 days Treasury bill rates) to changes in monetary policy rates. In Table 3, we report the results of the interdependency between monetary policy rate and short term and long term interest rates using the granger causality test. The result from Table 1 shows an interesting pattern of the link between monetary policy rate to savings deposit rate, prime lending rate and maximum lending rates were incomplete and failing the test of significance on the basis of the traditional t-test, the interest rate pass-through from monetary policy rate into interbank rates and long term interest rates rate and significant on the basis of the traditional t-test.

	SHOR	RT TERM MAR	KET RATES		LONG TERM MARKET RATES
	(1, SDR)	(2, IBR )	(3, PLR)	(4,MLR)	(5, TBR)
С	2.7953	-2.5071	19.1434	22.1692	-5.1494
	(6.5497)***	(-1.4294)	(28.1112)***	(19.8234	(-4.3143)***
MPR	-0.0424	1.4258	-0.2528	-0.1045	1.4342
	(-0.8969)	(7.3256)***	(-3.3459)**	(-0.8427)	(10.8289)***
R-squared (R <sup>2</sup> )	0.0118	0.4447	0.1434	0.0104	0.6363
Adj. R-squared	-0.0028	0.4365	0.1303	-0.0042	0.6309
F-statistic	0.8044	53.66***	11.1950***	0.7101	117.2651***
Durbin-Watson	0.1194	0.7357	0.1555	0.1148	0.2489

Table 1: Estimated Result at their Levels

The table reports results for the regression estimate over the sample periods 2007:M1-2012:M9. The models reported includes:  $SDR_t=\alpha_0+\alpha_1MPR_t+U_t$ ;  $IBR_t=\alpha_0+\alpha_1MPR_t+U_t$ ;  $PLR_t=\alpha_0+\alpha_1MPR_t+U_t$ ;  $MLR_t=\alpha_0+\alpha_1MPR_t+U_t$ ; and  $TBR_t=\alpha_0+\alpha_1MPR_t+U_t$ : where the dependent variables are savings deposit rate, interbank tare, prime lending rate, maximum lending rate and treasury bill rate. The explanatory variable in all five equations is monetary policy rate (MPR). The figures in parenthesis are the t-statistics and the symbol \*\*\*, \*\* and \* indicates significant at the 1, 5 and 10 percent respectively.

The result shows that interbank rates and Treasury bill rate increases substantially with an increase in monetary policy rate, with both variables passing the test of significance at the 1 per cent level and having a relatively high adjusted  $R^2$  (coefficient of determination) value of 0.43 and 0.63 for interbank rate and Treasury bill rates respectively. The result of the unit root test reported in Table 3 however, shows the variables were all not stationary at their individual level hence the need for differencing of the variables reported in Table 1.

Table 2: Unit Root Test for the Variables

	Augmented	Dickey-Fuller	r Test		
Variables	Levels	Status	First Difference	Status	
MPR	-0.8654	I(0)	-7.8611	I(1)	
SDR	-2.7481	I(0)	-9.7377	I(1)	
IBR	-2.8392	I(O)	-9.0248	I(1)	
PLR	-2.3235	I(O)	-6.0145	I(1)	
MLR	-2.5526	I(0)	-10.78482	I(1)	
TBR	-1.4153	I(0)	-6.6138	I(1)	

The table shows the result of the Augmented Dickey-Fuller (ADF) set of unit root test at the levels of the individual variables and at their first difference with I(0) indicating integrated of order 0 and I(1) indicating integrated of order 1.

Table 3 shows the result of the regression estimate after first differencing. From the result reported in Table 2, all the variables became stationary after first differencing. The result obtained after first differencing appears to be similar with the result reported in Table 1. With the exception of the low  $R^2$ , monetary policy rate had a positive impact on interbank rate and Treasury bill rate. However, the pass

through of monetary policy rate was only complete in relation to interbank rate where the coefficient of interbank rate was positive and greater than unity.

	5	SHORT TERM	MARKET RA	TES	LONG TERM MARKET RATES
	(1, SDR)	(2, IBR )	(3, PLR)	(4,MLR)	(5, TBR)
С	- 0.0244	0.0111	-0.0206	0.0893	-0.0608
	(-0.7151)	(0.0312)	(-0.3483)	(1.0058)	(0.4597)
D(MPR)	0.0426	1.1075	0.0670	-0.0520	0.7577 ´
	(0.7177)	(1.7998)**	(0.6521)	(-0.3383)	(3.3051)***
R-squared ( $R^2$ )	0.0077	0.0467	0.0064	0.0017	0.1420
Adj. R-squared	-0.0072	0.0323	- 0.0086	-0.0133	0.1290
F-statistic		3.2392**			10.9239***
Durbin-Watson	0.5150		0.4252	0.1144	
Duroni watson	2.3454	2.3270	1.4638	2.5543	1.6885

Table 3: Estimated Result at their First Difference

The table reports result for differenced regression estimate over the sample periods 2007:M1-2012:M9. The models reported includes:  $d(SDR_t) = \alpha_0 + \alpha_1 d(MPR_t) + U_t$ ;  $d(IBR_t) = \alpha_0 + \alpha_1 d(MPR_t) + U_t$ ;  $d(PLR_t) = \alpha_0 + \alpha_1 d(MPR_t) + U_t$ ;  $d(MLR_t) = \alpha_0 + \alpha_1 d(MPR_t) + U_t$ ; and  $d(TBR_t) = \alpha_0 + \alpha_1 d(MPR_t) + U_t$ : where the dependent variables are savings deposit rate, interbank tare, prime lending rate, maximum lending rate and treasury bill rate respectively. The explanatory variable in all five equations is monetary policy rate (MPR). The figures in parenthesis are the t-statistics and the symbol \*\*\*, \*\* and \* indicates significant at the 1, 5 and 10 percent respectively.

Both results give an idea of the relative effectiveness of monetary policy in tracking other rates in Nigeria. An interesting finding of the study is that savings deposit rate does not respond to changes in monetary policy rate while the rate of adjustment of Treasury bill rate to monetary policy rate is weak as indicated by the difference series. Both results show the response of interbank rate to monetary policy rate to be strong and positive which has strong implication for investment in Nigeria.

Table 4: Mac-Kinnon Critical Value for Rejecting the Null Hypothesis of Unit root

	Augmented Dickey-Fulle	er Test Criteria	
Critical Values	ADF at Levels	ADF at First Difference	
1%	-4.0987	-4.1009	
5%	-3.4772	-3.4783	
10%	-3.1661	-3.1667	

The table shows the Mac-Kinnon critical value for rejecting the hull hypothesis of unit root in the model. We reject the null hypothesis of no unit root if the critical Mac-Kinnon value greater than the observed ADF tau statistics at the 1, 5 and 10 percent levels respectively.

In Table 5, we report the test of the interdependencies between the variables and the response time of retail interest rate to changes in monetary policy rate. The result indicates that monetary policy granger causes only interbank rates with the effect almost immediately. Also of interest to us is the fact that there appears to be a bi-directional relationship between monetary policy rate and interbank rate. This is indicated by the high and significant F-statistics values of 12.6 and 4.8 respectively with the values passing the test of significance at the 1 percent level. Other notable findings from the granger causes monetary policy rate and not the other way round.

#### CONCLUSION

This study set out to analyse the effect of monetary policy rate on interest rates in Nigeria over the sampling periods 2007-2012. The study utilized monthly time series data obtained from the Central bank of Nigerian Statistical Bulletin over the period (2007:M1-2012:M9). The choice of this period is remarkable as it marked the period of the change of the Central Bank from the use of minimum rediscount rates (MRR) to monetary policy rate (MPR) as the benchmark rate of interest for the country. The period is also unique as it coincided with period in which the Central Banks of most countries responded to the 2007-2008 global financial crises with substantial use of monetary policy tools.

#### Table 3: Granger Causality Test

	Augmented Dickey-Fuller	Test Criteria	
Direction of Causality	Lag Le	ength F	7-Statistics
$\Delta_{MPR} \longrightarrow \Delta_{SDR}$	1		0.5107
$\Delta SDR \longrightarrow \Delta MPR$	1		5.0734***
$\Delta MPR \longrightarrow \Delta BR$		1 12.6264***	
$\Delta_{\rm IBR} \longrightarrow \Delta_{\rm MPR}$		1 4.8351***	
$\Delta MPR \rightarrow \Delta PLR$		2 0.0278	
$\Delta PLR \longrightarrow \Delta MPR$		2	5.0295***
$\Delta_{MPR} \longrightarrow \Delta_{MLR}$		1	0.8077
$\Delta MLR \rightarrow \Delta MPR$		1	0.0203
$\Delta_{MPR} \rightarrow \Delta_{TBR}$		1	0.1758
$\Delta TBR \rightarrow \Delta MPR$	1		7.8407***

The table shows the granger casualty of interdependencies between monetary policy rate and retail interest rate. The symbol  $\Delta$ represents change in the one variable in response to change in the other variable in the model. In the table, monetary policy exhibits a unidirectional relationship with interbank rate with the shock taking place immediately. The \*\*\* indicates significance at the 1 per cent level.

The major findings of this study is that the pass-through of monetary policy rate into short term and long term retail interest rates in Nigeria is sticky. The only evidence of the effectiveness of monetary policy can be seen only in the relationship between monetary policy rate and interbank rates. The low pass-through rate evident in the study could be easily explained by the presence of high menu and transaction cost and imperfect financial market condition. The weak link between monetary policy rate and savings deposit rate can be explained with the low savings incentives. Overall, the study reveals that the continuous use of monetary policy rate (MPR) by the Central Bank of Nigeria as the benchmark rate for tracking the movement of other market rates of interest and maintaining economic stability is suspect and calls for an immediate review. Monetary policy changes through variation in MPR or stability in MPR as has been the case between 2011:M9- 2012:M9 (see Appendix 1.) has produced contradictory result in all the retail market rates with the exception of Treasury bill rate which seems to track movement in monetary policy rate as clearly visible in the trend in figure 1. This result is in line with the earlier findings of Salami and Kelikume (2012) that continuous use of monetary policy tools to maintain price stability is not likely to yield the desired medium to long-term monetary policy goals.

#### **Limitations**

The major limitation of this study is the short time span of 2007-2012. Although this problem was successfully addressed with monthly time series data it would have been useful if we compare the interest rate pass through using annual and quarterly time series data over a longer period. Another limitation is that the study did not track the performance of monetary policy in the era of minimum rediscount rates. A comparison of the effectiveness of monetary policy in the era of minimum rediscount rates and monetary policy rate would have thrown more light into the effects of monetary policy rate on other market rates in Nigeria. These limitations notwithstanding, the study generally shows a weak interest rate pass-through in Nigeria.

OBS	MPR	QUARTERLY CHANGE	DIRECTION OF CHANGE	
2007 Q1	10			
2007 Q2	8	-20	Decrease	
2007 Q3		0	Constant	
2007 Q4	9.5	18.75	Increase	
2008 Õ1	9.5	0	Constant	
2008 Ö2	10.25	7.89	Increase	
2008 Q3	9.75	-4.87	Decrease	
2008 Õ4	9.75	0	Constant	
2009 Q1	9.75	ŏ	Constant	
2009 Ö2	8	-17.94	Decrease	
2009 Q3	6	-25	Decrease	
2009 Õ4	Ğ	0	Constant	
2010 Q1	6	Õ	Constant	
2010 Q2	6	Õ	Constant	
2010 Q3	6.25	4.16	Increase	
2010 Q4	6.25	0	Constant	
2011 Q1	7.5	20	Increase	
2011 Q2	8	6.66	Increase	
2011 Q3	9.25	15.62	Increase	
2011 Q4	12	29.72	Increase	
2012 Q1	12	0	Constant	
2012 Q2	12	0	Constant	
2012 Q3	12	0	Constant	

The table shows the Central Bank of Nigeria Monetary Policy Rate (MPR) over the sample period of the observation. From the observation, monetary policy rate have been relatively stable over the sample period but this stability is hardly reflected in the movement of other rates as shown in figure 1.

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# GAAP VS. IFRS TREATMENT OF LEASES AND THE IMPACT ON FINANCIAL RATIOS

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#### ABSTRACT

As of January 1, 2011 most of the world financial market economies are using International Reporting Standards (IFRS) as the required framework for financial statements. A non-comprehensive listing includes the European Union Countries, Canada, Australia and New Zealand. In the United States, US Generally Accepted Accounting Principles (GAAP) is still required but adoption of IFRS has support of many accounting firms and professional organizations and is under consideration by the SEC. This case study focuses on differences in the treatment of leases and the impact of these differences on financial statements and selected financial ratios. Students take GAAP financial statements and prepare an IFRS based balance sheet and income statement. The need to understand both GAAP and IFRS rules regarding leases is required to adequately address this case study. This case study is suitable for use at both the undergraduate and graduate levels. It could be used in an Intermediate Accounting II, Accounting Theory, Financial Statement Analysis or an International Accounting class, as well as an Investment Finance course.

KEYWORDS: US GAAP, IFRS, Capital Lease, Operating Lease, Financing Lease, Ratios.

#### Background

ACE Corp, a publically traded NASDAQ company (symbol ACE), is a manufacturer of electrical automobiles. Its main headquarters is based in Detroit, Michigan and the company has been operating since 1996. The company sells their electrical automobiles to auto manufacturers as well as the retail market on a worldwide basis. Its major clientele is Ford, General Motors and Toyota and has captured about 10 percent of the world market of the electrical automobile sales. Its stock sells at 25 US Dollars per share, and its 52 week price range is between 19.75 and 27.15 US Dollars, with a market cap of 10.6 billion dollars.

Their financial statements presented below for the year ending December 31, 2011 has been prepared using GAAP. The controller would like to see the effect of IFRS treatment of leases on the financial statements, and you have been assigned this task. In particular, the controller would like to see the impact GAAP and IFRS differences have on balance sheet, income statement and selected financial ratios. The company would like to adapt IFRS by as early as next year as it is considering a new stock issue in the Tokyo Stock Exchange, which requires IFRS compliance.

#### ACE Corp Balance Sheet (in 000's) 12/31/2011

ASSETS Current Assets Cash Accounts receivable Investments Inventory (FIFO )	\$33,000 25,000 10,000 <u>50,000</u>	LIABILITIES AND SHAREHOLDERS EQUITY Current liabilities Accounts payable Accrued expenses Taxes payable Total current liabilities	\$20,000 15,000 <u>5,000</u> \$40,000
Total current assets	\$118,000		
Property, plant and equipment		Noncurrent liabilities	
Assets (cost)	100,000	Bonds payable	<u>50,000</u>
Less: Accumulated		Total liabilities	\$90,000
Depreciation	<u>(30,000)</u>		
Total property, plant And equipment	\$ 70,000	Shareholders' equity	
Intangible Assets		Common stock (\$1 par)	\$50,000
Trademark	5,000	Retained earnings	60,000
Goodwill	7,000 \$12,000	Total shareholders' Equity	110,000
Total assets	\$200,000	Total liabilities and Shareholders' equity	\$200,000

#### ACE Corp Income Statement (in 000's) For the year ended 12/31/2011

Sales	\$ 250,000
Cost of goods sold	175,000
Gross profit	\$ 75,000
Selling and administrative expenses	
(Exclusive of amortization and depreciation)	<u>31,000</u>
Earnings before interest, taxes, depreciation and amortization	\$ 45,000
Amortization and depreciation expense	<u>10,000</u>
Earnings before interest and taxes	\$ 34,000
Interest expense	4,000
Income before tax	\$30,000
Tax expense (30 %)	<u>9,000</u>
Earnings from continuing operations and before Extraordinary	\$21,000
item	
Net loss from Hurricane (net of 4,500 taxes)	<u>(10,500)</u>
Net Income	\$10,500

# **ADDITIONAL INFORMATION**

Ace entered into a lease on January 1, 2011 with the following terms:

• Ace leased specialized machinery manufactured by the lessor, Bell Corp., which will enable Ace to manufacture their electric cars in a much more efficient manner. This machinery does not have a resale market and was made specifically for ACE to meet its specifications.

• The lease term is for 3 years with a minimum lease payment of \$10,000. Payment is due on December 31 of each year, with the first payment due on December 31, 2011. At the end of year 3, Ace has the option of leasing the equipment for one additional year for \$2,500. At the end of the lease term, ownership reverts back to lessor. There is no option to buy the equipment.

• The lessee will pay all executor costs.

- The estimated useful life of the lease is 49 months (4 and 1/12 years.)
- The fair market value of the equipment is \$30,000.
- The implicit rate of Bell Corp. is 6 percent, and this is known to the lessee, Ace.
- The incremental borrowing rate of Ace is 7 percent.

## REQUIRED

1- Differentiate between an operating lease and a capital/ financing Lease for GAAP financial reporting purposes.

2- Under GAAP, has this been treated as a capital lease / financing Lease for Ace or an operating lease?

3- Under IFRS, should this lease be classified as an operating or a financing lease?

4- Describe the different reporting results between GAAP and IFRS and make the necessary adjusting entries to conform the financial statements to IFRS compliance for Year 1.

5- Prepare an income statement under IFRS for year 1. Assume that the net income remains the same under IFRS as it does for GAAP and any difference is reconciled in the tax expense and tax payable accounts.

6- Prepare balance sheet under IFRS for Year 1.

7- Compute the following ratios for Year 1, under both IFRS and GAAP reported totals:

Current Ratio Quick Ratio Cash Ratio Times Interest Earned Debt to Capital Ratio Debt to Shareholder Equity Ratio 8- Comment on your findings in 7 above.

# **INSTRUCTOR NOTES**

#### **Case Overview**

This case focuses on GAAP and IFRS differences in the treatment of leases and the grounds for classification as an operating or capital lease. It is designed to have students conduct research on GAAP and IFRS pronouncements. They are asked to compare and contrast the differences in the treatment of leases under the two frameworks. It also requires students to prepare the adjusting entries for the IFRS conversion. They will prepare IFRS statements, and compute and compare financial ratios for both GAAP and IFRS statements. Finally, they will discuss the status of IFRS adoption and the impact of its adoption in the US.

# **Case Learning Objectives**

The case is designed to have students identify reporting issues and apply U.S. and international authoritative accounting literature by researching the FASB Accounting Standards Codification and the International Financial Reporting Standards (IFRS).

The specific learning objectives are for the student to:

a) Identify differences in GAAP and IFRS treatment of leases:

b) Prepare adjusting entries to convert GAAP based financial statements to IFRS income statement and balance sheet and

c) Prepare an IFRS income statement and balance sheet

## Suitable Classes for This Case

Since this case requires research into GAAP and IFRS pronouncements, it is most appropriate for students who have completed or are currently enrolled in intermediate financial accounting II. It can be used at the graduate or undergraduate levels in a variety of additional financial reporting courses including accounting theory, international accounting, and financial statement analysis, as well as an investment finance course.

#### Suggested Teaching Approach

The case may be offered as an individual case study or as a group project. For more advanced accounting students, this case may be offered as an individual project. It could have a weight of 10-15 % of the final course grade.

For less advanced students, the case may be offered as a collaborative group project. This would enable students to demonstrate and develop team working skills. The case presents an opportunity to discuss the status of IFRS implementation in the US and the impact IFRS had on JAL Corp. The in-class review of the solution and case discussion can be completed as part of a 50 minute class.

In grading the case write-ups, instructors should evaluate the identification of relevant issues, proper accounting for the IFRS conversion and computation of the ratios including the computational accuracy of numbers, quality and depth of research as evidenced by proper citations of the literature. We suggest that the instructor explain the basis for grading at the outset.

#### **Pointers for Classroom Discussion**

After the review of the IFRS statements, the instructor may wish to discuss the impact of IFRS. Suggested questions to ask the class could be: What impact will IFRS have on AXE Corp.'s income statement and balance sheet? What are the benefits of adopting IFRS? What are the disadvantages of IFRS? You may wish to have students research the current status in the US of IFRS adoption.

#### SUGGESTED SOLUTION

# Q 1 Differentiate between an operating lease and a Capital/ Financing Lease for financial reporting purposes.

An operating lease is treated as a rent expense and recorded on the income statement. An operating lease is an off balance sheet transaction and is preferred by companies because it lowers the liabilities and the debt ratio. A capital lease –per GAAP, termed as a financing lease under IFRS, is treated as a purchase of a Property, Plant and Equipment and capitalized as such on the Balance Sheet. The minimum lease payments required on the lease are recorded as a liability on the Balance Sheet at the present value. The discount rate is the lessee's incremental borrowing or the implicit rate of the lease, if it is lower and known by the lessee. The liability is separated into its current and long term components which affects the current ratio.

#### Pointers for Classroom Discussion

Discuss the differences US GAAP based bright line rules, versus principles based IFRS requirements for distinguishing between operating versus capital/financing leases ?

# Q2. Under US GAAP, has this lease been treated as a capital lease / financing lease for Ace or an operating lease?

Under GAAP, if the lessee meets one of the four tests listed below, the lease is treated as a capital lease; otherwise it is an operating lease.

Test 1: Economic Life Test: The lease term is equal to or greater than 75% of the economic life of the asset. In this case, the lease term is 3 years divided by the economic life of 4.1 years, yields 73%. Test 1 not met.

Test 2: Transfer of Ownership Test: If at the end of the lease term, ownership transfers to lessee, then this test is satisfied. Test 2 is not met in this case as there is no transfer of ownership at the end of year 3.

Test 3: Bargain Purchase Option: If the lessee has the option to purchase the lease at a bargain purchase price, then this test is satisfied. In this case, there is no bargain purchase option, so test 3 is not met.

Test 4: Economic Recovery Test: If the Present Value of the Minimum Lease payments is 90 percent or greater than the fair market value of the asset.

In this case, the present value of the Minimum Lease Obligation is \$26,730. This divided by the fair market value of the leased asset of \$30,000 is 89 percent; just shy of the 90% requirement. Test 4 is not met.

#### Minimum Lease

Assuming a Capital/ Financing lease

Year	Payment	Interest 6%	Principal	Obligation-Payable
1	\$10,000	1,604	8,396	26,730
2	\$10,000	1,100	8,900	18,334
3	\$10,000	566	9,434	9434
	\$30,000	3,270	26730	0

Since none of the 4 tests is met, the lease is treated as an operating lease to the AXE Corp. under US GAAP. Note should be made that AXE just missed some of these tests by fractional amounts. Pointers for Classroom Discussion

Discuss why a corporation has an incentive for making a lease classification as operating rather than capital?

#### Q3. Under IFRS, should this lease be classified as an operating lease or a financing lease?

Under IFRS, this lease is clearly a financing/capital lease as the criteria of lease type is based on principles, and not rules. Under IFRS, if the lessee assumes the economic benefit and risks of the leased asset, and the facts of the situation are such that the lease resembles a financing lease, then it is treated as a financing lease. The fact that the lessee has a fourth year rental option at a very significant discount, coupled that this machine is specialized in nature for ACE's use, and many of the tests under GAAP are nearly met which are an indicator of a financing classification rather than operating lease. The lessor manufactured this equipment to ACE's specifications and in effect transferred the risk to AXE upon the inception of the lease. Further, ACE was able to circumvent the capital lease rules under GAAP by making estimates work to its advantage.

# Q4. Describe the different reporting results between GAAP and IFRS and make the necessary adjusting entries to conform the financial statements to IFRS compliance for Year 1.

In each of the three years of the lease, GAAP treats the operating lease payment of \$10,000 as rent expense on the income statement and is not recorded on the balance sheet. A: Year of lease Inception: Under IFRS, the financing/ capital lease is treated as a purchase of property, plant and equipment and capitalized on the balance sheet as such in the amount of \$26,730. Additionally, the Minimum Lease obligation is shown on the balance sheet as a liability in the amount of \$18,334 (\$26,730 less the year 1 payment of \$8,396).Of this amount, \$8,900 is classified as a current liability and \$9,434 is classified as a long term liability. On the income statement, depreciation expense is \$8,910 (26,730 divided by the lease term of 3 years) and interest expense is \$1,604, for a total of \$10,514.

B: Subsequent to Year of Inception-years 2 and 3 of lease payments:

IFRS: The \$10,000 lease payment is treated as an interest expense as calculated above; \$1,100 in year 2 and \$566 in year 3 in addition to a depreciation expense of \$8,910. Over the 3 year period, the total expense will be the same at \$30,000 under both methods of reporting (operating v. capital/financing.)

#### ADJUSTING ENTRIES YEAR 1 TO CONFORM TO IFRS

1-Dr. Leased Asset-Financing Lease 26,730 Cr. Minimum Lease Obligation-Financing Lease 26,730

To record capitalization of the lease2-Dr. Depreciation Expense8,910Cr. Accumulated Depreciation8,910

To record depreciation expense on the capitalized lease3-Dr. Interest Expense1,604Dr. Minimum Lease Obligation-Financing Lease8,396Cr. Rent expense/Selling and Administrative expense 10,000

To adjust lease from operating to capital/financing

4-Dr. Minimum Lease Obligation-Financing lease 18,334

Cr. Minimum Lease Obligation-Financing lease -Current liability 8,900

Cr. Minimum Lease Obligation-Financing lease -Long Term Liability 9,434

To correctly classify the Minimum Lease Obligation to its liability term components5- Dr. Selling and Administrative Expense15,000Cr.- Extraordinary Item15,000

To reclassify extraordinary item as an operating expense This is calculated by the extraordinary loss, shown net of taxes of 10,500 divided by 1 less the tax rate of 30 percent, or .7, which yields a before tax loss of 15,000.

Pointers for Classroom Discussion

There is no prompt for this reclassification. Students must demonstrate critical thinking by identifying that IFRS does not allow for the use of an extraordinary item. It is important to point out that we should not be so focused on one issue (lease treatment) that we overlook other issues that should be apparent.

Also note that the reclassification of the extraordinary loss is shown before tax (10,500+ 4,500) 6- Dr. Tax Payable 514 Cr. Tax Expense 514 To reconcile a net income total of \$10,500; an amount equal to the GAAP reported total.

#### Pointers for Classroom Discussion

Show that under capital/financing lease treatment, the expense will be greater in the early year(s), resulting in lower income, and lower in the latter year(s), showing a higher income. In the entire term of the lease, each method will yield identical expense totals. Use of the amortization schedule will illustrate this clearly.

Q 5. Prepare an Income Statement under IFRS for year 1. Assume that the net income remains the same under IFRS as it does for GAAP and any difference is reconciled in the tax expense and tax payable accounts.

#### ACE Corp

Income Statement (in 000's) For the year ended 12/31/2011

Sales	\$250,000
Cost of goods sold	175,000
Gross profit	\$ 75,000
Selling and administrative expenses	
(Exclusive of amortization & depreciation) less (3) 10,000 =	36,000
Earnings before interest, taxes, depreciation and amortization	\$ 39,000
Amortization and depreciation expense $10,000 + (2)8,910 =$	18,910
Earnings before interest and taxes	20,090
Interest expense $4,000 + (3)1,604 =$	5,604
Income before tax	\$14,486
Tax expense 4,500-(6)514 =	3,986
Net Income	10,500

#### Q6. Prepare Balance Sheet under IFRS for Year 1.

ASSETS Current Assets		LIABILITIES AND SHAREHOLDERS EQUITY Current liabilities	
Cash	\$33,000	Accounts payable	\$20,000
Accounts receivable	25,000	Accrued expenses	15,000
Investments	10,000	Taxes payable 5,000-(6) 514	4,486
Inventory (FIFO)	50,000	Minimum lease obligation	8,900
Total current assets	\$118,000	Total current liabilities	\$48,386
Property, plant and equipment		Noncurrent liabilities	
Assets (cost)	100,000	Bonds payable	50,000
Leased Assets	(1) 26,730	Minimum Lease obligation (4)	\$9,434
Less:Accumulated	(38,910)	Total Liabitties	\$107,820
Depreciation(30000 +8,910)			
Net	\$ 87,820	Shareholders' equity	
Intangible Assets		Common stock (\$1 par)	\$50,000
Trademark	5,000	Retained earnings	60,000
Goodwill	7,000	Total shareholders' Equity	110,000
Total assets	\$ <u>12,000</u> \$217,820	Total liabilities and Shareholders' equity	\$217,820

# Part 7: Ratio Calculations:

Current Ratio=current assets/current liabilities 118,000/40,000 118,000/48,316	<b>GAAP</b> 2.95	<b>IFRS</b> 2.44
Quick Ratio=current assets-inventory/current liabilities 18,000-50,000/40,000 118,000-50,000/48,316	1.70	1.41
Cash Ratio=cash/current liabilities 33,000/40,000 33,000/48,316	.825	.683
Times Interest Earned =EBIT/ Interest Expense34,000/4,00020,090/5,604	8.5	3.58
Debt to Capital Ratio=Total Liabilities/Total Assets 90,000/200,000 107,820/217,820	.45	.4950
Debt to Shareholder Equity Ratio=Liabilities/Shareholder' Equity 90,000/110,000 107,820/110,000	.8181	.98

#### Part 8: Comments

The ratios clearly indicate that IFRS rules result in more conservative ratio results with respect to the current and long term creditor when compared to US GAAP. Every liquidity ratios is lower under IFRS and the differences are significant. Similarly, all long term ratios are also more conservative when compared to US GAAP. The implications here is that IFRS will have far greater negative implications on bond covenant agreements as well as other long and short term creditor legally binding agreements than US GAAP.

#### CONCLUSION

IFRS is the future of worldwide financial reporting and should be included as a major part of any accounting and/or business curriculum in the US, as well as the rest of the world. This case illustrates a situation where a Balance Sheet and Income Statement is prepared using GAAP as a basis and converting to IFRS for comparison purposes, with the focus being from the creditor point of view. In this case study IFRS rules are discussed, and key Lease accounting similarities and differences between GAAP and IFRS are addressed and its implications on the corporation's creditors.

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# EARLY AFTERMARKET DIVERGENCE OF OPINION AND MISPRICING OF FIXED PRICE IPOS ON BURSA MALAYSIA

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# ABSTRACT

Mispricing of initial public offerings (IPO) in finance literatures refers to the deviation of IPOs offer price from its aftermarket price. Miller (1977) argue that divergence of opinion provide alternative explanation for IPO mispricing where high divergence of investors' opinion (DOP) is associated with overvaluation in the early aftermarket. The current study investigates whether divergence of investor opinion influences the decline of Malaysian IPOs first day return reported in some of the Malaysian studies, where low divergence of opinion is assumed as an indication that IPOs are fairly price, while high divergence of opinion as an indication that the IPOs are either overvalued or undervalued. The study incorporates a sample of 267 fixed-priced IPOs for study period of 2004 to 2011. It uses market adjusted initial return (MAIR) in measuring mispricing, while DOP is measured using the volatility of excess return as suggested by Gao et al. (2006) and Jerwartowski and Lizinska (2012).

JEL: G12, G14, G24

# **INTRODUCTION**

The recent headwind faced by global market, has attracted institutional and foreign investors to invest in Asian securities, especially in initial public offerings (IPOs). Bursa Malaysia is of no exception to this, in fact the local market is seen as an IPO oasis. Despite the overwhelming response from investors, the high quality IPOs trade between 3 to 10% above offer price, while other IPOs trade below offer price in the immediate aftermarket. This statement poses a question on whether Malaysian IPOs are fairly price or are they subject to mispricing. Past studies associate the low level of Malaysian IPOs initial return to liberalization of pricing mechanism and other regulatory changes that took effect after 1997 (Yong & Isa 2003). However, despite the liberalization of pricing mechanism a large number of IPOs in Malaysia remain as fixed price IPOs, thus, the current study infers that the low level of initial return is not solely due to liberalization of pricing mechanism rather it is due to changes in investors' expectation. There is a possibility that the restructuring of listing board (2009), changes in equity guidelines and disclosure requirements (2008) influence the aftermarket investor's expectation.

The early evidence of mispricing in international market come from studies of Ibbotson & Jaffe (1975), Ibbotson (1975), Ritter (1984), Beatty & Ritter (1986) that show on average IPO initial return is 15% in US. Subsequent studies conducted by Miller & Reilly (1987), Ritter (1991), Rajan & Serves (1997) for study period of 1970-1990 indicate that initial return ranges between 9% -14%. Most of the studies document that asymmetric information and risk composition explain early market mispricing (see Beatty & Ritter 1986). Recent study by Loughran & Ritter (2004) reveal that changes in issuers' objective function provide a better explanation for cross sectional variation in mispricing from 1999-2000.

The early evidence of pricing inaccuracy in Malaysian IPO comes from Dawson (1987)'s. His findings reveal that the average market adjusted initial return was 166% for 21 IPOs over a study period of 1978 to 1983. Subsequent studies show that mispricing (or market adjusted initial return) has gradually dropped for example Loughran *et al.* (1994) reveal that initial return for 1980-1991 has reduced to 80.3%. Paudyal *et al* (1998) show that average adjusted return is 62% for period 1984-1995, and Annuar and Shamsher (1998) show that average market adjusted initial return is 135% for period 1980 - 1994. The variation of initial return is explained by regulatory interference, oversubscription ratio, market volatility, allotment of shares, underwriter reputation, ex-ante risk, and signaling theory. Recent study by Moshirian *et al.* (2010)

document that despite the gradual reduction in underpricing, Malaysian IPO's average initial return ranks as the third in Asia next to China and Korea (61.8% within the study period of 1991 - 2004) but exceed the developed Asian countries such as Hong Kong, Japan and Singapore. The review of literatures reveals that there is no empirical evidence on the effect of DOP on IPO mispricing on Bursa Malaysia. Moreover, studies related to DOP in developed nations are rather sparse, and it primarily focuses on book built IPOs. These studies document high DOP is associated with overvaluation in the early trading and lower long run return (see Miller 1977; Houge *et al.* 2001; Diether *et al.* 2002; Gao *et al.* 2006; Jewartowski & Lizinska 2012). Although most of the studies provide evidence that DOP explains early market mispricing and poor long run performance, there is a need to examine the influence of DOP on IPO undervaluation for fixed priced IPOs in emerging market.

The current study finds that DOP not only results in overvaluation (unintended underpricing) as posit by (Miller 1977) and Houge et al (2001) but it also attributes to undervaluation of Bursa Malaysia between 2004 to 2011 (see table 1, 2, 3 and 4 in full paper or pp slides). Both undervalued and overvalued IPOs are sensitive to the IPOs risk composition. The findings also show that issuers are interested in current proceeds and that they give less emphasis on future price movement unlike developed nation as proposed by Loughran and Ritter (2004). The results across sub periods show that IPOs issued between 2004 to 2005 and 2011 to 2010 are sensitive to DOP, indicating that some IPOs experience unintended underpricing, while others experience undervaluation. IPOs issues between 2006-2007 and 2008-2009 are possibly fairly priced as there is insignificant influence of DOP on MAIR.

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# ADDING MARKOWITZ AND SHARPE TO THE INVESTMENTS PROJECT

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# ABSTRACT

Introductory investments courses revolve around Harry Markowitz's modern portfolio theory and William Sharpe's Capital Asset Pricing Model. Nonetheless, the textbook versions of these seminal contributions tend to obscure their economic insights, focusing instead on their mathematical consequences. In this paper, we suggest simple additions to the basic portfolio spreadsheet project that will distinguish the economics (e.g., the market portfolio is efficient) from its necessary consequences (e.g., the beta-expected return relationship is linear). We also show that it is important to use Excel's MMULT function, not Solver, to find efficient portfolios.

**JEL:** G10, G11

**KEYWORDS:** Portfolio Theory, CAPM, Investments Pedagogy

# **INTRODUCTION**

An investments course without Harry Markowitz and William Sharpe is unthinkable. Markowitz's (1952) modern portfolio theory and Sharpe's (1964) Capital Asset Pricing Model (CAPM) are the bedrock upon which investments courses are built. Nonetheless, a student does not actually see the concepts as the authors originally presented them; unless she takes one of the few doctoral-level classical papers courses, she sees instead only a textbook distillation. This distillation obscures important detail—in particular, it muddles the distinctions between the authors' (Nobel-prize-winning) economic insights and their purely mathematical consequences.

In this paper, we show how a few simple spreadsheet-based tweaks to a traditional investments project can highlight these critical distinctions. Excel's matrix multiplication functions allow students to identify mean-variance efficient portfolios easily. With those portfolios in hand, they can replicate Markowitz's graphs that show efficient portfolios lying on a line (not on a parabola!), and they can verify Roll's (1977) critique of tests of the CAPM—the observation that it is always possible to derive a linear beta/return relationship ex post. Students who have worked through these sorts of exercises will have a much deeper understanding of modern portfolio theory.

# Project Additions From Markowitz

The problem with the traditional textbook presentation of the efficient set is that it plots portfolio expected return against portfolio standard deviation—that is, it depicts portfolios in ( $\sigma_p$ , E(R<sub>p</sub>)) space, in which the minimum-variance set traces out a nice, bullet-shaped curve. As nice as the graph looks, this presentation obscures the true drivers of both expected return and variance: the portfolios' asset weights. Variance does not determine expected return; instead, both are determined by the chosen weights.

The most important graph for students is Markowitz's Figure 2, in which he illustrates the determination of the efficient set for a portfolio of three assets. In this figure, he identifies efficient portfolios in (weight<sub>1</sub>, weight<sub>2</sub>) space, where weight<sub>i</sub> is the proportion of portfolio funds invested in asset *i*. In this space, Markowitz identifies portfolios offering the same level of expected return and the same level of variance. The former he calls "isomeans"; these plot as lines, the slope of which depends upon the

expected returns of the various assets. "Isovariances," on the other hand, form a set of concentric ellipses (assuming no pair is perfectly positively correlated), whose center is the global minimum-variance portfolio. Efficient portfolios maximize expected return for any given level of variance; these portfolios are the tangencies between an isovariance ellipse and an isomean. These tangencies trace out a line in (weight<sub>1</sub>, weight<sub>2</sub>) space. Students accustomed to seeing efficient portfolios lying on a parabola may be surprised by this. They may also be surprised at the ease with which they can now find the efficient set of risky assets. Given two points from Markowitz's linear efficient-set relationship, they can generate the others simply as other points on that line.

Figure 1 illustrates the steps I ask my students to follow to generate their efficient set. First, they plot two-asset portfolios against various three- asset portfolios. (Note that the equally weighted [EW] three-asset portfolio is shown as a triangle.) Students can see that their two-asset portfolios fall on a perfect parabola, but that the three-asset portfolios do not behave as nicely. Moreover, while some three-asset portfolios dominate some two-asset portfolios, not all do.

Next, they add three efficient three-asset portfolios. By adding these, students learn that the efficient frontier is still bullet-shaped, but that it has moved to the left (in the preferred direction, to lower standard deviations). They find the efficient portfolios using both Excel's Solver optimizer and its matrix multiplication "MMULT" function. Our point in asking students to find several efficient portfolios is to show them that these portfolios will lie on a line in (weight<sub>1</sub>, weight<sub>2</sub>) space.

This is Markowitz's linear efficient set. (Of course, for this to work, students must have truly efficient portfolios. The portfolios found using MMULT lie on a line in weight space; they therefore are efficient. However, portfolios found using Solver do not lie on a line; Solver's results, while close approximations, therefore are not efficient. Given the problems with Solver, students should use MMULT to complete the generation of the efficient set.) With their efficient portfolios in hand, students can now verify Markowitz's efficient set. Using MMULT, students can quickly generate several efficient portfolios. Plotting those in (weight<sub>1</sub>, weight<sub>2</sub>) space, they will find that they lie on a line ( $R^2 = 1$ ), just as Markowitz said they would. Next, they should use that line to generate additional portfolio weighting schemes. These new portfolios must also be efficient. Finally, they should plot these new portfolios in the standard ( $\sigma_{p}$ , E( $R_{p}$ )) space—where they will fall on a perfect parabola, just as the two-asset portfolios did.

This is the big payoff: making the link between what they know (the parabola) and what Markowitz described (the line). Looking beyond the parabola to Markowitz's line makes students focus on what defines an efficient portfolio of specific assets: the weights chosen. The weights determine expected return and variance; variance does not determine expected return. The optimal weighting scheme for a given level of variance—the one that maximizes expected return—can be identified in (weight<sub>1</sub>, weight<sub>2</sub>) space as the tangency between the given isovariance ellipse and the highest attainable isomean line. This tangency will lie on a line with all of the other efficient portfolios. We have just shown how a simple application of MMULT can help students find that line, and thus to find a simple way to identify other efficient portfolios.

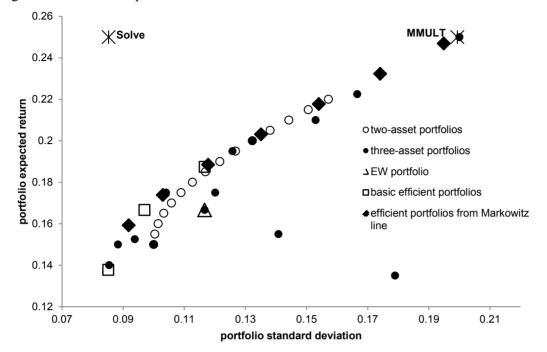


Figure 1: Results of Exploration of Markowitz's Efficient Set

This figure presents the results of the sequential derivation of Markowitz's efficient frontier. We start with random two-and three-asset portfolios. We then add the global minimum-variance portfolio and the efficient portfolios that match the equally weighted three-asset portfolio on return and variance. Next, we add the results from a test of Excel's Solver optimizer and its MMULT function; note that the Solver solution lies outside the minimum-variance set. Finally, we add three-asset portfolios generated using the linear weight relationship described by Markowitz, and show that those portfolios lie on the parabolic frontier in the ( $\sigma_{p}$ ,  $E(R_{p})$ ) space above.

#### Project Additions From Sharpe

Students often leave their basic finance courses thinking that the Capital Asset Pricing Model (CAPM) *is* the equation for the Security Market Line:  $E(R_i) = r_f + \beta_i * [E(R_M) - r_f]$  (where  $\beta_i$  is the systematic risk of asset i, rf is the return on the riskless asset, and  $E(R_M)$  is the expected return on the market benchmark). However—given unlimited borrowing or lending at a risk-free rate, homogeneous expectations, and no market frictions, among other assumptions—the economic insight of the CAPM is that *the market portfolio is efficient*. If the benchmark is efficient, the relationship between beta and expected return *must* be linear. "...[W]e may arbitrarily select *any* one of the efficient combinations, then measure the predicted responsiveness of *every* asset's rate of return to that of the combination selected; and these coefficients will be related to the expected rates of return of the assets in exactly the manner pictured"—a line (Sharpe, 1964; emphasis original).

Using Excel, students can easily prove that beta/return linearity is a consequence of the efficiency of the "market." We present the results from a simple exercise in Figure 2. We started with price data for three assets, Harley Davidson stock (HOG), Ford stock (F), and the S&P 500 market index. We then found the daily returns, averages, sample standard deviations, and covariances. Doing these sorts of calculations is standard for basic investments spreadsheet projects.

Given the covariances, we used Excel's MMULT function to solve for the efficient portfolio that has the same expected return as the equally weighted portfolio. We used these weights to create an ex post

efficient portfolio, P. Finally, we calculated "betas" using both the S&P500 and efficient portfolio P as benchmarks. We repeated this process using Solver to identify the efficient portfolio.

The beta/return relationships based on the S&P500 and Solver's "efficient" portfolio are decidedly nonlinear. Early empirical results like this seemed inconsistent with the CAPM. However, as Roll (1977) argued, the CAPM is an ex ante model, and testing the beta/return relationship using an arbitrary benchmark using ex post data could not be expected to result in the linearity implied by the theory. On the other hand, if it is linearity that we want, we can always find it—as long as we are careful to choose a benchmark that we know if efficient. Since P was efficient, using it as the benchmark did lead to a linear beta/return relationship—a perfect one, just as is implied by the mathematics of "efficiency."

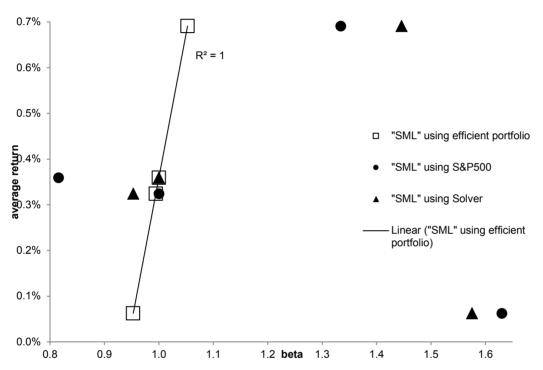


Figure 2: A Test of the Linearity of the Security Market Line

This figure demonstrates the equivalence between an efficient benchmark and a linear return/beta relationship. Using ex post data, inefficient benchmarks (here, both the S&P500 and the portfolio identified by Solver) give return/beta relationships that are nonlinear. However, an efficient benchmark—always available ex post—will lead to a linear relationship, as demonstrated by the trendline.

# CONCLUSIONS

Using a spreadsheet project in investments courses has become almost a given. However, while these projects harness the power of Excel to perform basic calculations on real data, they have not yet exploited it to explore the theoretical underpinnings of portfolio theory. In this paper, we show several straightforward investments applications of Excel's matrix multiplication functions (following Arnold, 2002). Students will not only learn a valuable Excel tool (and the potential problems with its Solver optimizer), but will also become much more familiar with portfolio mathematics.

Markowitz's (1952) figures look daunting, but students—once they get past their fear—find them extremely helpful. Being able to recreate the graphs in Excel demystifies them. Using MMULT allows students to identify efficient portfolios, which is more than half the battle. Given a few efficient weighting schemes, students can verify that the optimal portfolios—the tangencies between the isomean lines and the isovariances ellipses—lie along a line in (weight<sub>1</sub>, weight<sub>2</sub>) space. This is surprising for

students, who are accustomed to the traditional parabolic representation. Using the linear relationship they find, they can work back to that parabola by finding more efficient portfolios from the line, then replotting them in ( $\sigma_p$ , E(R<sub>p</sub>)) space. This is the big payoff: linking Markowitz's line directly to the traditional parabola. We can also use Excel to work through some issues with the Capital Asset Pricing Model. Most importantly, we can demonstrate part of Roll's critique of the CAPM: that the linearity of the beta/return relationship does not prove Sharpe's theory, but is simply a mathematical consequence of the efficient portfolio from data they choose on their own, then using that portfolio as the benchmark for beta calculations. Their beta/return relationship *will* be linear—just as Roll said. Students will then be in a much better position to distinguish the ex ante nature of the economic contribution of the CAPM—that the market portfolio is efficient—from the ex post consequence of efficiency, and they will be better able to evaluate the empirical tests of the CAPM. They will also become immune from the error of equating the SML equation with the CAPM theory.

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# WHY THE LAST IN FIRST IN INVENTORY METHODS (LIFO) SHOULD BE SAVED?

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# ABSTRACT

The Last in First out Method (LIFO) is presently under severe scrutiny from the financial community which may soon culminate in its repeal as an acceptable accounting method. There are pressures from the SEC in conjunction with the International Financial Accounting Standards Board (IFRS) to standardize accounting standards worldwide. In addition, there is political pressure imposed by the US Obama administration to raise additional revenues. Both groups strongly oppose LIFO, raising a strong possibility that's its complete elimination as an accounting method will occur by as early as 2014. This paper will address the reasons defending LIFO as an acceptable accounting method.

# **INTRODUCTION**

LIFO can defended on economic, taxation, accounting reporting and political grounds as this paper explore. The second part addresses the current and future state of LIFO. Part 3 discusses the defenses of LIFO which include the following aspects: First, from an accounting theory perspective, it satisfies the principles of matching and the income statement economic reality of LIFO presentation. Second, from the perspective of the US government, tax loopholes are many and LIFO is but one small example. If the US government eliminates these many tax loopholes at the expense of lowering the tax rates, as indicated, the result will be a tax neutral revenue situation which does nothing to help the deficit. Third and lastly, IFRS and US GAAP are in the process of convergence, which is far different than having identical accounting standards. Differences between the two entities in financial reporting will remain in effect after 2014. The result is that the need to eliminate LIFO is not necessary from taxation, political or financial reporting position.

# **DEFENSES OF LIFO**

LIFO can be defended on present accounting theory, taxation principles as well as political issues as discussed next.

Accounting Theory: LIFO satisfies many present underlying US GAAP principles including; the matching principle which results in as income statement economically reality presentation. LIFO's greatest defense is that the Income Statement represents economic reality as it matches current inventory cost with current revenue, making the Income S statement correct. The matching principal is adhered to by LIFO use. However, the matching principle will only apply if there is a build-up of inventory reserves. If there is a liquidation of inventory, then matching will not occur as there will be predated, older inventory matched to current revenue.

However, even if this liquidation were to occur, the SEC and US GAAP require disclosure of the effect on earnings resulting from this liquidation. As such, matching is restored and current cost is matched with current revenue, ensuring an Income Statement reality presentation.

TAX LOOPHOLES: The US Tax code has a series of tax loopholes initiated by special interest groups. Eliminating these loopholes is seen as a political impossibility and only then will LIFO's repeal have

credence. Even if all these loopholes are indeed eliminated, the result will be a reduction in tax rates resulting in a tax neutral situation which does not help in political goals, such as deficit reduction for the US government. Further, the elimination of LIFO will result in roughly a \$30 Billion reduction in the deficit. This is calculated by the additional revenue generated by non LIFO use, known as the LIFO Reserve of \$80 according to Compustat times a 35 percent corporate tax rate. This is greatly much lower than the government's calculation. Further, a tax collection of \$30 billion compared to a US Deficit of \$15 Trillion has a most insignificant impact on deficit reduction.

IFRS CONVERGANCE: IFRS and US GAAP are in the process of convergence, which is far different than having identical accounting standards. Differences between the two entities in financial reporting will remain in effect well after 2014 and these differences will be many. As an example, differences will exist in the area of consolidation as a joint task group has acknowledged differences in US GAAP and IFRS well beyond 2014. LIFO is presently used by roughly 5 percent of US Companies, so this inventory difference should in no way impact convergence. LIFO is a tax benefit; US phenomena and differences in financial reporting will result as a result of cultural reasons. Exact financial reporting is not in the radar screen between the US and the rest of the world, so LIFO repeal should not impact convergence.

# CONCLUSION

LIFO can be defended on many aspects including accounting theoretical frameworks, taxation aspects and political aspects as it relates to worldwide financial reporting convergence. This paper explored these defenses. The limitation of this paper is the ultimate repeal of LIFO, which although not presently likely, is possible. Further research should focus on the argument against LIFO as well as other defenses of LIFO.

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Compustat

PWCoopers.org

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# MODELING AND FORECASTING INFLATION WITH ARIMA AND VAR: THE CASE OF NIGERIA

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# ABSTRACT

A major concern of entrepreneurs and monetary authorities in Nigeria in the past decades has remained the issue of successful prediction of the movement of the general price level with some level of certainty. The result of which will guarantee successful planning on the part of monetary authorities and continued profit drive on the part of entrepreneurs and investors. The aim of this study is to use a univariate time series in the form of Autoregressive Integrated Moving Average (ARIMA) model developed by Box and Jenkins and multivariate time series model in the form of Vector Autoregressive model (VAR) to forecast inflation for Nigeria.Our focus is to use change in monthly CPI data obtained from the National Bureau of Statistics over the period 2003 to 2012 to predict the movement of the general price level.Based on different diagnostic and evaluation criteria, the best forecasting model for predicting inflation in Nigeria will be selected. The significance of the study is that result obtained will enable policy makers and businesses to track the performance and stability of key macroeconomic indicators using the forecasted inflation values.

JEL: E3 E17, E31

**KEYWORD**: Modeling Inflation, Forecasting, ARIMA, VAR

# **INTRODUCTION**

Maintaining a reasonable degree of price stability and ensuring an adequate expansion of credit to foster steady and sustainable economic growth have been the primary goals of monetary policy. A challenging problematic macroeconomic economic issue confronting nation states and monetary authorities today is the issue of tracking and predicting the movement in the general price level. Nigeria like most developing countries has had significant gaps between policy formulation, policy implementation and policy target. In most cases, policy goals lags behind targets and are often times unattainable due mainly to the prevalence of policy inconsistencies driven by the inability of the monetary authorities to predict inflation and its real determinants. Inflation apart from being a major monetary policy performance indicatoris a useful indicator in informing the public about the likely trends in the movement of leading and lagging macroeconomic indicators the knowledge of which drives inflationary expectation and therefore serve as a nominal anchor for bargaining process and fixed contracts (Moser, Rumler and Scharler, 2004). Generally, a clear understanding of inflation forecasting technique is crucial for the success of monetary policy in tracking the movement of macroeconomic aggregates and in maintaining stability and sustainability in economic growth.

The paper compares Vector Autoregressive (VAR) model and Autoregressive Integrated Moving Average (ARIMA) model for forecasting the rate of change of the Nigerian Consumer Price Index (CPI). The main attraction to VAR modeling is that it has a natural basis for testing conditional predictability unlike the ARIMA model which is poor in predicting turning points but is relatively robust in generating short term forecast. Thus most empirical analysis on forecasting has focused on the use of VAR while ARIMA is used as a benchmark forecasting tool. Theforecasts of the models with the highest predictive accuracy are then evaluated using a range of criteria that characterize optimal forecasts.

Following the introductory section, the rest of the paper is organized as follows: Section 2 summarizes the theoretical and empirical literature. Section 3 describes the models, methods and sources of data. Section 4 compares the forecasting performance of the models and evaluates the resulting models with the highest predictive accuracy. Section 5 concludes the paper.

# LITERATURE

The central role of monetary policy in developed, emerging and developing economies has remained the maintenance of price stability price stability and the ensuring of adequate expansion of credit to foster economic growth and development. Generally, economists across the various economic divide differ in their analysis of the root causes of inflation and in the way and manner inflationary spiral should be managed and controlled. While the monetarists hold the strong view that sustained growth in money supply not matched by corresponding growth in output will cause inflation at the long run (Milton Friedman 1956, 1960, 1971), the structuralist economist explain the long run inflationary trend in developing countries in terms of structural rigidities, market imperfection and social tensions such as relative elasticity of food supply, foreign exchange constraints, protective measures, rise in demand for food, fall in export earnings, hoarding, import substitution, industrialization and presence of political instability (Thirwell, 1974; and Aghevei and Khan 1977).

Given the monetarists view and the structuralist view on the root causes of inflation, it is becoming increasingly difficult to forecast inflation in not only the developed economies but also in the OECD countries and in particular in emerging and developing economies. In the empirical studies conducted by Olga, Kamps and Nadine (2009), and Stock and Watson (2008), they found that, over the longer term (3-year), forecasting horizon, and monetary indicators contain useful information for predicting inflation in most New Member States (NMS) countries of the European Union (EU). Models of inflation forecast and accuracy has evolved in several studies ranging from extrapolation to econometric modeling. The early study of inflation forecast by Landsman and Damodaran (1989) in which the univariate autoregressive integrated moving average method was used drew the conclusion that, ARIMA parameter estimator improves the forecast accuracy of the model because of its lower mean squared percentage error.

Although, inflation forecasting with autoregressive integrated moving average method (ARIMA) compares favorably with other forecasting models such as the vector autoregressive method (VAR), and the Bayesian VAR, it has been shown that ARIMA performs poorly forecasting turning points and yields poor forecast values when applied to volatile and high frequency data (Meyler, Kenny and Quinn (1998).In the study carried out by Ho and Xie (1998), using the ARIMA framework, they concluded that ARIMA model is a viable alternative that gives satisfactory results in terms of its predictive performance.According to Wayne (1998), the use of the vector autoregressive model in forecasting exhibits significant degree of predictive accuracy when compared with other forecasting models. This same conclusion was reached by Meyler et al (1998). Applying the Bayesian VAR approach forecasting, they found the VAR approach improves forecasting performance.

Black, Corrigan and Dowd (2000), comparing an AR (1) with the Mean Absolute Percentage Errors (MAPEs) of different models adding one variable at a time, found the money supply variable to improve the forecast values of inflation significantly, while the study by Jacobson, Jansson, Vredin and Warne (2001) shows that VAR model with long-run restrictions is useful for both forecasting inflation and for analyzing other issues that are central to the conduct of monetary policy. Using a VAR model, Gottschalk and Moore (2001) assessed the link between monetary policy instruments and inflation in Poland. The result showed that although exchange rate was found to be effective with respect to output and prices, direct linkage between interest rate and inflation do not appear to be very strong. Toshitaka (2001), found mark-up relationship in estimating and forecasting inflation;

excess money supply and the output gap were of importance in determining long run equilibrium correlation model of inflation.

Other studies on inflation forecasting in different region produced mixed results. The study by Fritzer, Moser and Scharler (2002), found VAR models to outperform ARIMA in terms of forecasting accuracy while Bokhari and Feridun (2006),indicate that VAR models do not perform better than the ARIMA model.Espasa, Poncela and Senra (2002), concludes that ARIMA models outperformed the VECM and dynamic factor models while Hubrich K. (2003), found that VAR models outperformed the autoregressive forecasting models. The study by Alnaa and Ahiakpor, (2005) followed the same pattern as other models proving the VAR modeling technique to be highly efficient in its predictive ability. But, the study by Binner, Bissoondeeal, Elger, Gazely and Mullineux (2005) drew a different conclusion. Using Neural Networks (NN) forecasting model-a nonlinear forecasting approach, they found the VAR and ARIMA modeling technique to be statistically less superior to the Neural Network model.

Recent studies by Clausen and Clausen (2010), using the Phillips curves showed that model forecasting based on ex post output gaps generally improve the accuracy of inflation forecasts compared to an AR (1) forecast model. The literature is rich in the support of the forecasting strength of ARIMA modeling technique in forecasting (Hill and Fildes, 1984; Libert, 1983; Poulos, Kvanli, and Pavur, 1987; Texter and Ord, 1989). Although, recent studies in Nigeria, has shown the VAR modeling technique to be highly useful in predicting short run forecast (Adebiyi, Adenuga, Abeng, Omanukwe and Ononugbo 2010, Uko and Nkoro 2012), there is however need to revisit the forecasting ability of both ARIMA and VAR model in Nigeria.

# METHODOLOGY

The study intends to forecast core inflation in Nigeria with the aid of *a* univariate time series model in the form of Autoregressive Integrated Moving Average (ARIMA) model developed by Box and Jenkins and a multivariate time series Vector Autoregressive model (VAR). The choice of both models is linked to resent forecasting success in both ARIMA and VAR modeling. Our objective is to establish the best forecasting model in tracking price movement in Nigeria.

# Data

The data used in this study is sourced from the Central Bank of Nigeria Statistical Bulletin and the National Bureau of Statistics. The frequency of the data is monthly and the period covered is 2003:01 to 2012:06. The variable used is the rate of change in the consumer's price index, broad money supply (M2) and our focus is to forecast core inflation. The INF and M2 data gathered was estimated and analyzed with E-views 7 estimation software.

# Model Inflation with ARIMA

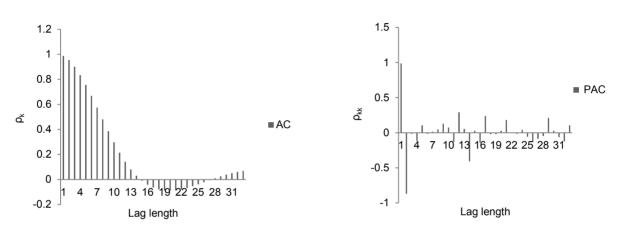
Modeling and forecasting inflation with the Box-Jenkins methodology requires the following systematic steps. The first step is the data collection and examination stage, the second step is the identification of the data, while the third step is the estimation of the model. The fourth and fifth step is the diagnostic checks and forecasting stage respectively.

#### Data Collection and Examination

ARIMA entails the use of Box-Jenkins methodology which requires that the sample data be at least more than 50 observations (Meyler et al 1998) and even when sample observations is greater than 50 there is need to examine the data for the existence of structural breaks which if present in the data willnecessitate only the examination of a sub-section of the data or the need to introduce a dummyvariable but in this case the data was stationary at levels as shown by Figure 1 and 2, this can easily be verified in the augmented Dickey-Fuller test of unit root with 5 per cent level of significance reported in Table 1 below.

Figure 1: Autocorrelation Function

Figure 2: Partial Autocorrelation Function



Note: Figure 1 and 2 is the Autocorrelation and Partial Autocorrelation functions showing that the core inflation series is stationary at levels and that it is an Autoregressive Moving Average (ARMA) process. This is seen in the pattern.

	<b>T-Statistics</b>	Prob.	Status	
Augmented Dickey-Fuller test Statistics	-3.459039**	0.0490	I(0)	
Test Critical Values : 1% level	-4.042042			
5% level -3.450436 10% level -3.150549				

Note: The table is the result of the Augmented Dickey-Fuller (ADF) which indicates that the core inflation series is integrated or stationary at levels. \*\* indicates significance at 5 per cent level.

# Identification

The estimation of univariate time series variable with autoregressive integrated moving average method ARIMA (p,d,q), requires identification of the appropriate value of p, d and q.Where p denotes the number of autoregressive term, d is the number of times the series has to be differenced to obtain an I(0) series and q is the number of moving average term. The chief tool of identification is the plot of the autocorrelation function (ACF), the partial autocorrelation function (PACF), the correlograms and the augmented Dickey and the Fuller (1971, 1981) test for unit roots.

From Figure 1 and 2, it can be seen that the series is stationary this can easily be verified in the augmented Dickey-Fuller test of unit root reported in Table 1above.

Having obtained the order of integration (d), our next step is to obtain the ARMA pattern in the inflation series by considering the autocorrelation function (ACF), the partial autocorrelation function (PACF) and

the associated correlograms. This process involves using the Box-Jenkins methodology where the ACF and the PACF plots are used to predict p and q in the ARMA model. The selection of p and q is usually based on the following characteristics of the ACF and the PACF plots. If data is purely AR (p), then ACF will decline steadily and PACF will cut off suddenly after p lags but if data is purely an MA (q), ACF will cut off suddenly after q lags and PACF will decline steadily. An ARMA (p, q) model usually exhibits a complex pattern in the ACF and PACF function.

From the plot of the autocorrelation function and the partial autocorrelation function reported in figure 1 and 2, we got a clear pattern to help predict p and q. The criteria used in this case are;

$$BIC = Log\left(\frac{rss}{n}\right) + \left(Log(n)^* \frac{k}{n}\right)$$
(1)

$$HQC = Log\left(\frac{rss}{n}\right) + \left(2*Log(Log(n))*\frac{k}{n}\right)$$
<sup>(2)</sup>

$$AIC = Log\left(\frac{rss}{n}\right) + \left(2*\frac{k}{n}\right)$$
(3)

Where, SC = Schwarz criterion, HQC = Hannan-Quinn criterion and AIC = Akaike information criterion, K = the number of coefficient estimated, rss = residual sum of squares and n = the number of observations With the aid of the correlogram and the partial correlogram reported inFigure 1 and 2,we obtained the identified model which is seen clearly in the plot of the ACF and the PACF function reported in figure 1 and 2.

The tentatively identified ARMA (p, q) modelis specified as follows;

$$CINFL = \delta + \alpha_1 CINF_{t-1} + \alpha_{12} CINF_{t-12} + \alpha_{14} CINF_{t-14} + \beta_1 U_{t-1} + \beta_2 U_{t-2} + \beta_{12} U_{t-12} + \beta_{14} U_{t-14}$$
(4)

Where; CINFL is inflation series at levels;

 $\alpha_1, \alpha_{12}$  and  $\alpha_{14}$  are the coefficients of the AR (p) process while  $\beta_1, \beta_2, \beta_{12}$  and  $\beta_{14}$  are the coefficients of the MA(q) process. AR (p) is autoregressive process while MA (q) is moving average process.

After the successful identification of the ARMA (p, q) process, we estimate the model with EVIEW 7 estimation software. The result of the ARMA process is reported in Table 2.

The selection of the ARMA (p, q) model in equation (4) is based on the ACF and the PACF functionreported in Figure 1 and 2. Since the core inflation variable was stationary at levels as shown in the unit root test reported in Table 2, there was no need to difference the variable. The graph of the correlogram reported in Figure 1 and 2 reveals some interesting pattern. First, both the ACF function (Figure 1) and the PACF function (Figure 2) exhibits some form of exponential decay. The spikesfrom the graph shows the ACF to be statistically significant at lags 1, 2, and 14 while for the PACF, lags 1, 2, 12 and 14 appeared to be statistically different from zero.

We therefore proceed to estimating the ARMA (p, q) process with the result reported in table 2. Thereafter, we proceed to checking the reasonable fit of model to data. This is done by simply obtaining the ACF and the PACF from the residual of the regression estimate reported in table 2.

#### **Diagnostic Checks**

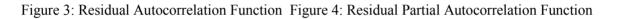
The model diagnostic check entails examining the graphical analysis of the plot of the residuals of the estimated model and the plot of the autocorrelogram of the residuals to verify whether the residuals of the

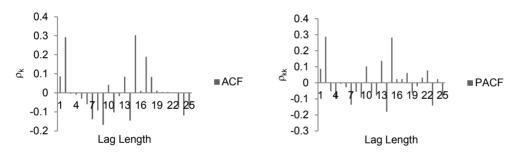
estimated models are purely random. This is seen clearly in figure 3 where the residual of the autocorrelation function at various the lags hover around zero with the exception of lags 2, 9 and 15 while in figure 4 the residual of the partial autocorrelation function at various lags hover around zero with the exception of lags 2, 15 and 23. The estimated ARMA (p, q) model can therefore be accepted as a purely random walk hence there is need to look for another ARIMA model.

Variables	Coefficient	Std. Erro	orT-StatisticProb.	
С	10.2102	1.0247	9.9637	0.0000
AR (1)	0.9709	0.0154	62.9968***	0.0000
AR (12)	-0.2555	0.0389	-6.5681***	0.0000
AR (14)	0.1892	0.0385	4.9124***	0.0000
MA(1)	0.8045	0.0750	10.7272***	0.0000
MA (2)	0.2108	0.0571	3.6923***	0.0004
MA (12)	-0.0764	0.0301	-2.5338***	0.0130
MA (14)	0.4434	0.0428	10.3454***	0.0000
R-squared 0	.995995 Adjusted R-squared	0.995691		
F-statistic 3	268.825*** Durbin-Watson	1.7836	13	

Table 2: Estimated ARMA (p, q) Coefficient

Note: The table shows that 99 per cent of the systematic variation in core inflation is explained by it lag. The \*\*\* indicates that AR, MA and F-statistics are significant at the 1% level while the Durbin-Watson shows the absence of serial correlation.





Note: Figure 3 and 4 is the Autocorrelation and partial autocorrelation function of the residual showing that the residual is a random walk.

# Forecasting

We however, proceed to forecasting core inflation with the ARMA (p, q) model with the forecast shown in figure 5 below.

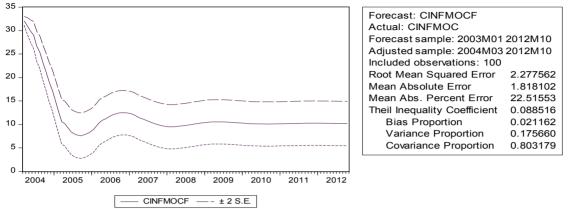
# Modeling Inflation with VAR

The seminal work by Sims (1980) brought succor to the modeling of multivariate autoregressive models with the use of unrestricted vector autoregressive model (VAR). Conventionally, in VAR modeling technique, we consider several endogenous variables together with each endogenous variable explained by its lagged values and the lagged values of all other endogenous variables in the model. In VAR estimation and forecasting, unit root test is not necessary because of the loss of information, observation(Sims 1980). In modeling and forecasting inflation with VAR, we used a univariate autoregressive framework, in which the model is specified describing the interdependence of money supply (broad money supply) and core inflation. In its simplest form, we express the set of n variables collected in the n x 1 vector  $Y_t$  on their own lags and those of the other variables in the model. The model can be expressed as;

67

$$Y_{t} = \alpha + \beta_{1i} Y_{t-1} + \beta_{2i} Y_{t-2} + \dots + \beta_{pi} Y_{t-p} + u_{t}$$
(5)

Figure 5: ARIMA Forecast



Note: The figure shows an historical simulation and forecast of core inflation. The second line is the forecast while the other two lines are the bound for standard error of forecast.

The coefficient matrix  $\beta_{1i}$  are the n x n matrix (made up of the inflation and money supply variables) and  $u_i$  is an n x 1 vector of serially uncorrelated random error which is assumed to have a multivariate normal distribution  $u_i \sim iidN(0, \sum_u)$ .

Assuming  $Y_t$  is an n x 1 column vector composed of all the variables in our study, the VAR model simply relates current values of  $Y_t$  to past values of  $Y_t$  and an n x 1 vector of innovations  $U_t$ . This can be written precisely as follows;

$$y_{1t} = \beta_1 + \beta_{11}y_{1t-1} + \beta_{12}y_{2t-1} + \alpha_{11}y_{1t-2} + \alpha_{12}y_{2t-2} + \epsilon_{1t}$$
(6)

$$y_{2t} = \alpha_1 + \beta_{21} y_{1t-1} + \beta_{22} y_{2t-1} + \alpha_{21} y_{1t-2} + \alpha_{12} y_{2t-2} + \epsilon_{2t}$$
(7)

The VAR equation can be written more compactly as;

$$y_{t} = \alpha + \beta_{1} y_{t-1} + \beta_{2} y_{t-2} + u_{t}$$
(8)

Where  $\alpha$  is an n x 1 vector and  $\beta_i$ 's are n x n metrics.

To determine the appropriate lag length, we will employ the Akaike information criterion (AIC) and Schwarz criterion (SC). This is determined precisely with the aid of E-view 7 estimating software shown in Table 3 below.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-2063.813	0.0000	0.0000	39.72717	39.77802	39.74777
1	-1607.289	886.7099	0.0000	31.02479	31.17735	31.08660
2	-1527.079	152.7067	0.0000	29.55922*	29.81349*	29.66223*
3	-1524.693	4.452163	0.0000	29.59024	29.94622	29.73446
4	-1522.818	3.424672	0.0000	29.63112	30.08880	29.81654
5	-1521.029	3.199879	0.0000	29.67363	30.23302	29.90026
6	-1519.115	3.348920	0.0000	29.71376	30.37485	29.98159
7	-1515.907	5.491123	0.0000	29.72898	30.49179	30.03802
8	-1513.190	4.546325	0.0000	29.75365	30.61816	30.10389

Table 3: VAR Lag Order Selection Criteria

*Note:* \* *indicates lag order selected by choosing the lowest AIC and SC.* 

Table 4: Vector Autoregression Estimate

Variables	CINF	M2
С	0.4187	174731
	[2.3901]**	[1.7737]
CINF(-1)	1.8475	20649.56
	[38.8930]***	[-0.7730]
CINF(-2)	-0.8744	15022.23
	[-18.3353]***	[0.5601]
M2(-1)	0.0000	0.9273
	[-0.0780]	[9.5022]
M2(-2)	0.0000	0.0740
	[-0.0000]	[0.7550]
$\mathbf{R}^2$	0.9941	0.9947
Adjusted- R <sup>2</sup>	0.9939	0.9945
F-statistics	4495.88***	4963.39***
Durbin-Watson Stat	2.0591	2.0292

Note: CINF is the core inflation series and M2 is the broad money supply, while numbers in brackets are the lag length, numbers in parenthesis are the T-statistics. \*\* and \*\*\* indicate 5 and 1 per cent level of statistical significance respectively.

# **RESULTS ANALYSIS**

The ARIMA and VAR model results shows a good fit as shown by the Adjusted R-squared. While current inflation is explained by over 99 percent systematic variation in the independent variables in the ARIMA model, the VAR model also showed a very predictive power given the value of its coefficient of determination and adjusted coefficient of determination values of 0.9941 and 0.9939 respectively. The F-statistics for both models show an overall significant at the 1 per cent level. While the AR and MA's were all significant at the 1 per cent level in the ARIMA model, the VAR model only lag inflation was significant at the 1 per cent level while all the lags of money supply was not significant in determining variation in inflation. The Durbin-Watson statistic shows the absence of serial autocorrelation.Since our aim is to predict and forecast inflation and compare the forecast values of the ARIMA with that obtained from the VAR model, we generated the forecast values directly using the Eview 7 estimating software.

Table 5: Forecast Comparism of the VAR and ARIMA Model

Months	Actual CINF	<b>ARIMA Forecast</b>	VAR Forecast
2012M05	12.40	10.2350	12.1971
2012M06	12.70	10.2276	12.1026
2012M07	13.00	10.2199	11.9291
2012M08	13.3	10.2123	11.6896
2012M09	13.5	10.2053	11.3971
2012M10	-	10.1992	11.064

Table 5 show a comparison of the ARIMA and VAR forecast with actual core inflation published by the Central Bank of Nigeria. The forecast result shows the VAR forecast to be closer to the actual inflation values. CINF is core inflation.

# Conclusion

Current inflation in Nigeria which is put at 11.3 per cent in September 2012 (All Item Consumers Price Index) is expected to increase in the last quarter of 2012 following severe flooding and the washing away of farm lands in the earlier part of the year. Predicting price movement under periods of volatile food price increase has been made much more difficult. This study attempted forecasting inflation in Nigeria using monthly data over the periods 2003:01 to 2012:06. Two methodswhich has been used increasingly in the literature in forecasting inflation-the Vector Autoregressive Method (VAR) and the Autoregressive Integrated Moving Average Method (ARIMA) was used for this study with the sole objective of comparing both forecasting method to obtain the best for Nigeria. While the ARIMA model was a univariate time series model, the VAR model was a multivariate model that incorporates the interdependency amongst several endogenous variables. The result of our estimate from both ARIMA and VAR model tracks actual inflation values for the period 2012: 06 to 2012 09. However, the VAR model had the least error in terms of the minimum square error and is the closest approximate to current inflation in Nigeria. The study forecasted core inflation using VAR for the month of 2012:10 to be 11.06 percent.

# Limitation

A major limitation of this study is that it focused on two major forecast tool the VAR method and the ARIMA method and neglected the use of neural network analysis. In addition to this limitation is the fact that only one variable was used as a measure of inflation the core inflation. Subsequent studies on inflation forecasting in Nigeria will attempt to forecast inflation across a wider spectrum of inflation measures.

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# ABSTRACT

The Last in First out Method (LIFO) is presently under severe scrutiny from the financial community which may soon culminate in its repeal as an acceptable accounting method. There are pressures from the SEC in conjunction with the International Financial Accounting Standards Board (IFRS) to standardize accounting standards worldwide. In addition, there is political pressure imposed by the US administration to raise additional revenues. Both groups strongly oppose LIFO, raising a strong possibility that's its complete elimination. This paper will address the reasons defending LIFO as an acceptable accounting method strictly from a financial reporting perspective.

# INTRODUCTION

LIFO can be defended from a financial accounting reporting standpoint as this paper explores. Further, IFRS introduces several limitations and criticisms not evident in LIFO, further defending LIFO's position as an acceptable accounting method. This paper examines the defenses of LIFO. The second part discusses the current and future state of LIFO. First, from an accounting theory perspective, it satisfies the principles of matching, and the income statement economic reality of LIFO presentation. Additionally, a correct Balance Sheet amount can also be derived by use of the LIFO by utilizing the required LIFO Reserve disclosure. It also adheres to the historical cost and conservatism principles. Second, from the perspective IFRS, there is a deviation from historical cost, which allows for estimation of values, resulting in the possibility of earnings management by the use of the Lower of Cost or Market rule.

# **DEFENSES OF LIFO**

LIFO can be defended on present accounting theory, which can transform LIFO use to correct income statement financial reporting totals, as discussed next. It can also be defended that LIFO reserve disclosure can most accurately transform the Inventory balance sheet value to the most current cost presentation. Lastly, IFRS suffers in many areas of financial reporting, including the deviation from historical cost which leads to earnings management possibilities, not found in LIFO. 1-Accounting Theory:

A) LIFO satisfies many present underlying US GAAP principles including; the matching principle which results in as income statement economically reality presentation. LIFO's greatest defense is that the Income Statement represents economic reality as it matches current inventory cost with current revenue, making the Income statement correct. The matching principal is adhered to by LIFO use.

B) Balance Sheet Correcting Inventory total by use of the LIFO Reserve amount: Since LIFO expenses its most recent inventory acquisitions to cost, the ending inventory balance presentation is composed of the oldest inventory purchases, making the balance sheet potentially and practically very inaccurate. From a non-tax aspect, this is the most viable argument against LIFO. The saving grace however, is that LIFO use can depict a true, current inventory valuation by use of the required IFO Reserve disclosure. The LIFO Reserve is simply the difference between the LIFO and FIFO inventory value. A FIFO, balance sheet friendly total can easily be calculated by adding the LIFO Reserve .

C) Conservatism: LIFO presents the most conservative financial position of a company. In an age of inflating earnings, LIFO is a relief in this regard and adheres to the principles of US GAAP.

D) Historical Cost: Further, the goal of reliability is met by LIFO use as historical cost valuation is followed. This is consistent with US GAAP methodology.

2-IFRS Limitation Both, US GAAP and IFRS allow for the Lower of Cost or Market for the valuation of inventories. This can be coupled with the FIFO or Weighted Average Method of inventory accounting. Under US GAAP, LCM cannot be used if LIFO is the chosen accounting method. IFRS rules allow for losses to be reversed if market value increases.US GAAP does not allow reversal of losses under any circumstance.

The potential negative implications under IFRS are as follows:

1-A deviation from historical cost: By allowing the LCM, subjective values can be imposed in the valuation of non LIFO inventory, leading to earnings management and potential income manipulation practices.

2-Earnings management potential as losses are allowed to be reversed in a future period: This can be quite problematic and companies can easily create "income" simply by reversing inventory losses; assuming an increase in market values by controllable in house valuations. This is too easy and the results of earnings management are thus controllable within the company.

Use of LIFO will prevent the above limitations, as LIFO use is objectively based and disallows the LCM rule, which may become very problematic in financial reporting under IFRS. Under US GAAP, if a company uses LIFO, it is precluded from using LCM and in effect retains the historical cost principle, preventing potential earnings shenanigans.

# CONCLUSION

LIFO can be defended on many aspects of accounting theoretical frameworks, including the matching principle, historical cost principle, conservatism, reliability and relevance. Under LIFO, the income statement depicts a correct economic picture of a company's operations. The ability to present a correct Balance Sheet amount by use of the required LIFO Reserve amount is also easily possible, making the Balance Sheet economically relevant. Additionally, IFRS suffers from several key theoretical perspectives, such as the deviation from historical cost, reversal of previous year's inventory losses, consequently allowing for the possibility of practicing earnings management techniques, not evident in LIFO.

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# RELATIONSHIP BETWEEN ENVIRONMENTAL REPORTING IN CORPORATE ANNUAL REPORTS & CORPORATE PROFITABILITY IN BANGLADESH

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# ABSTRACT

This exploratory study is designed to investigate the extent and nature of environmental reporting in corporate annual reports by the listed companies of Bangladesh. Specifically, this study examines the relationship between environmental disclosure in corporate annual reports and corporate profitability in Bangladesh. In order to do this, a disclosure index has been developed and utilized to measure the extent of disclosure made by companies in corporate annual reports. The study shows that corporate environmental reporting in Bangladesh is still in its infancy as the level of environmental disclosures on corporate annual reports is very low and the nature of disclosure is in quantitative. This study reports that there is positive relationship between environmental reporting and corporate profitability.

**KEYWORDS:** Environmental accounting, Environmental Disclosure, Environment costs, Corporate Annual Reports, Corporate profitability, Disclosure Index.

# **INTRODUCTION**

All countries of the world are now concerned about the protection and development of the environment as environment is changing rapidly and becoming unsuitable for living. Specially, the developing countries (like Bangladesh) are experiencing the worst natural disaster. Business concerns are hold responsible for such changes in environment to a large extent as their activities exert adverse impact on the environment. "Environmental accounting"- sometimes referred to as "green accounting", "resource accounting" or "integrated economic and environmental accounting" has emerged during the last two decades in response to this issue. Review of available literatures and corporate practices reveal that a range of different perception and conception of environmental accounting has been developed.

However, recently there has been a movement towards a common understanding of the term Environmental accounting. Disclosure of environmental information in corporate annual reports began in the 1970s and it had sharply expanded in the 1990s (Kukobo *et al*, 2002). Over the last twenty years, corporate environmental reporting has become an issue of interest for researchers. Most of the corporate environmental reporting studies conducted so far have been in the context of developed countries such as Western Europe, the USA and Australia (see, for example, Choi, 1998; Adams et al., 1995 and 1998; Kisenyi and Gray, 1998; Tsang, 1998; Ernst and Ernst, 1978; Gray et al., 1987, 1995a and 1995b; Savage, 1994; Guthrie and Parker, 1990; Mathews, 1997; Roberts, 1990). Very few studies are available on the corporate environmental reporting practices in the developing countries. All of these studies were carried out in the context of newly industrialized countries such as Malaysia and Singapore and the African countries such as South Africa, Nigeria and Uganda. However, there is a lack of specific studies regarding Corporate Social and Environmental Disclosures both in developed and developing countries.

The concept of environmental reporting is relatively new in Bangladesh. Before 90's there is no evidence that public limited companies listed with Dhaka Stock Exchange (DSE) disclosed environmental information in their annual reports. In Bangladesh, there are very few studies available on environmental reporting and all of these studies have focused on environmental disclosure through corporate annual reports (see, for example, Belal, 1997 and 1999; Imam, 1999 and 2000; Hossain, 2002; Bala and Yusuf,

2003; Shil and Iqbal, 2005). Most of prior studies have mainly shown the extent of environmental disclosure through corporate annual reports. Thus an attempt has been made in this study to find out the relationship between environmental disclosures on corporate annual reports and corporate profitability of 20 companies for the year 2009- 2010. By measuring correlation between them, it has also been tried to find out whether there exist any association between them or not.

### Objectives Of The Study

This study is conducted for achieving the following objectives:

- a) Obtain an overview on the present status of environmental reporting practices by the listed companies in Bangladesh.
- b) Review corporate Annual Reports to identify environmental disclosures, their type and depth of disclosure.
- c) Identify whether the environmental disclosures in the Annual Report relate to the corporate profitability.
- d) Assess the nature and degree of relationship between environmental reporting and corporate profitability.
- e) Assess whether the environmental information disclosed in the Annual Report meets the requirements of the users of environmental information in the Annual Reports.
- f) Develop awareness of the companies about environmental disclosure in corporate annual reports.

#### Rationale Of The Study

Protection of environment is the burning question for today's world. All countries are now concerned about the environment because day-by-day environment is losing its balance and becoming unsuitable for living. Businesses are often held responsible for this. Findings of the study will help to know how much companies is concerned towards environmental protection & development and how they are performing their duties and responsibilities towards environment. Thus this study is expected to help the government to formulate the rules, regulations and guidelines for protecting environment from harmful activities of companies. The users of the environmental information disclosed in the corporate annual reports are expected to be benefited by this study in making correct decision. Finally findings of this study are expected to provide insight to how companies can better demonstrate a link between environmental disclosure/performance and financial performance which include:

- Encourage more companies to undertake environmental performance
- Promote the reputation of firms and encourage investments.

# LITERATURE REVIEW

Corporate environmental reporting has been mainly a phenomenon of developed countries and consequently, most corporate environmental reporting studies were confined to the developed countries (Belal, 2000). A handful of studies concentrated on the newly industrialized countries such as Korea, Hong Kong, Malaysia and Singapore and African countries such as South Africa, Nigeria and Uganda (Belal, 2000). In addition, a majority of such studies has primarily focused on the extent of environmental disclosure in corporate annual reports for a developing country. This section sheds light on studies (in the international context as well as in the context of Bangladesh) on corporate environmental reporting through corporate annual reports. In addition, attempts have been made in this section to illuminate the status of environmental reporting in Bangladesh.

Status of Environmental Reporting in Bangladesh

Bangladesh is experiencing a fast degradation of environment. Some examples of this degradation are Dhaka's terrible air pollution, the 'clinically dead' river Buriganga and widespread arsenic pollution in the underground water (Belal, 2000). The Government of Bangladesh started paying attention to the environmental management of Bangladesh since the 1990s and in order to improve the environmental condition, the Bangladesh Environmental Protection Act, 1995 was passed. At present, corporate environmental reporting is not mandatory in Bangladesh. A very few companies in Bangladesh are making efforts to provide environmental information on a voluntary basis, which are mostly qualitative in nature. But under the Bangladesh Environmental Protection Act, 1995, companies may be asked to disclose environmental information as and when required (Belal, 2000). The only mandatory environmental disclosure requirement in Bangladesh is the disclosure of expenditures on energy use. Under Schedule-XI, Part-II of the Companies Act 1994 and under Schedule, Part-II of the Securities and Exchange Rules, 1987, the total amount spent on the use of energy is to be shown in notes to the financial statements under a separate head of expenditure.

### Prior International Researches

In Hong Kong, Ho et al. (1994) studied 182 companies and found that only 9 out of these 182 companies (4.9 percent) disclosed environmental information in their annual reports for the year 1991. In Korea, the study of Choi (1998) reveals that out of 770 listed companies 64 companies disclosed environmental information in their audited semi-annual financial statements for the year 1997. Tsang (1998) conducted a longitudinal study of social and environmental reporting practices by the banking, food and beverages and hotel industries over a ten-year period from 1986 to 1995. The researcher found that 17 (52 percent) out of 33 listed companies made social and environmental disclosure in their annual reports. The study observed a steady increase in social and environmental disclosures during the late 1980s and then a stable pattern since 1993. In a study of 22 large MNCs in Nigeria, Disu and Gray (1998) noted that all companies included in the survey made some mandatory disclosures such as charitable donations, employment data, pensions, employee consultation, employment of the disabled, health and safety and corporate governance. The samples also made some voluntary disclosure predominantly in the area of employee reporting. In another study of only four companies of Uganda, Kisenyi and Gray (1998) observed that none of them made any environmental disclosure, all of them made employee related disclosure and two of them gave information on customers and community involvement. They tentatively conclude that "social and environmental disclosure in Uganda is scarce, low grade and of little importance" (Kisenvi and Grav, 1998, p. 18).

Savage (1994) studied 115 South African companies and found that approximately 63 percent companies had made environmental disclosures in their annual reports and the length of disclosure made by the number of pages had been 0.5. Profitability as well as corporate financial performance was used by a number of researchers as an explanatory variable for differences in disclosure level. However, the relationship between corporate financial performance and corporate social and environmental disclosure is arguably one of the most controversial issues yet to be solved (Choi, 1998). The results of different studies measuring the relationship between corporate financial performance and corporate social and environmental disclosure show mixed results. Among these researchers found a positive association between profitability and the extent of corporate social and environmental disclosure (Waddock and Gravess, 1997) whereas Cowen et. al (1987) found no association between the variables. Again, the results Belkaoui and Kirkpik (1989) tend to be more intriguing. They showed a significantly pair-wise correlation, yet an insignificant negative regression co-efficient for return on assets and corporate social and environmental disclosure. There are researchers those used log of profits and among these researchers, Roberts (1992) has found a positive relationship between profitability level of a company and corporate social and environmental disclosure. However, Patten (1992) fails to find any significant positive relationship between profitability and corporate social and environmental disclosure. In addition,

Roberts (1992), Ng (1985) and Davey (1982) found that the size of the company did not significantly explain an association with the level of corporate social and environmental disclosure and its variability.

### Prior Researches in Bangladesh

Very few studies on environmental reporting have been undertaken in the context of Bangladesh. All of these studies focused on environmental disclosure through corporate annual reports.Belal (1999) surveyed annual reports of 30 companies of Bangladesh of which 28 were listed and 2 were unlisted. He found that 90 percent of the companies under study made some environmental disclosure.Imam (2000) analyzed annual reports of 34 companies listed with the stock exchanges of Bangladesh for the year of 1996-97 and found that only 22.5 percent of the sample companies provided environmental information in their annual reports. Hossain (2002) conducted a survey of annual reports of 150 non-financial companies (listed on the Dhaka Stock Exchange) for the year of 1998-99. The study reveals that only 5 percent of the companies under study disclosed environmental information in the Directors' Report or in the Chairman's Report of their annual reports and not a single company disseminated any quantitative information as to the environmental items. An interesting finding of this study is that subsidiaries of multinational companies did not disclose environmental information.

Bala and Yusuf (2003) analyzed the annual reports of 249 public limited companies (listed on the Dhaka Stock Exchange) for the year of 2001. They report that only 26 (10.4 percent of the total) companies disclosed environmental information in the Directors' Report or in the Chairman's Statement or elsewhere in their annual reports. The information disclosed was qualitative in nature and companies did not follow any specific or standard reporting format. Shil and Iqbal (2005) surveyed 121 manufacturing companies listed on the Dhaka Stock Exchange (DSE). They reported that only 13 companies (11 percent of 121 companies) disclosed environmental information in their annual reports. All companies disclosed qualitative information in the Directors' Report. They developed a simple hypothesis to test whether there is any relationship of environmental disclosure with profitability and found that there is no relationship of environmental disclosure with the profitability.

Rahman and Muttakin (2005) surveyed 125 manufacturing companies listed on the Chittagong Stock Exchange (CSE) as on May 7, 2005. They analyzed the annual reports of these 125 companies for the vear 2003/2004. The researchers found that only 5 companies (4 percent of 125 companies) disclosed environmental information in their annual reports. The information was descriptive in nature; no quantification thereof was made. They also report that the disclosure of environmental information was done in different places of the annual report and there was no standard environmental reporting framework. Bose (2006) analyzed 5 years' annual reports of 11 Petrobangla companies for examining their environmental reporting status. He found that in 1998-199 and 1999-2000, only 45.45% and in 2000-01, 63.63% and in 2001-02 and 2002-03, only 81.81% of Petrobangla companies disclosed environmental information in their annual reports. The nature of information disclosed was qualitative and descriptive; the reporting companies did not attempt to quantify the environmental information. In addition, companies provided only positive information and ignored negative information. This study also shows that most of the Petrobangla companies provided information only on protection of the environment, pollution control, planting of trees and other matters. They did not provide any information regarding waste generation, conservation of energy, water wastage, recycling of waste and noise nuisance. Environmental information was disclosed either in the Chairman's Statement or Director's Report.

Hossain, Islam and Andrew (2006) surveyed 107 non-financial companies (listed on the Dhaka Stock Exchange) for the year 2002-2003. The study shows that on average 8.33% of Bangladeshi companies disclose social and environmental information in their corporate annual reports. These disclosures were voluntary in nature and largely qualitative. The study reported the results of multiple linear regressions to

test the association between a number of corporate attributes and the extent of social and environmental disclosure in company annual reports for a developing country, Bangladesh. The results showed that corporate environmental disclosure levels are associated with some company characteristics. For Bangladesh, the variables those were found to be positively significant in determining disclosure levels are the nature of the company (INDUSTRY), presence of debentures in the corporate annual reports (DEBENTURE), and the net profit margin (NPMARGIN). Specifically, in Bangladesh, they found that manufacturing companies with higher profitability and those that had issued debentures tended to disclose more social and environmental information.

Most of prior studies in the context of Bangladesh have mainly concentrated on the extent of environmental disclosure through corporate annual reports but they did not give much attention on the relationship of the environmental disclosure with several corporate attributes (such as age, size, efficiency, profitability, multi nationality, industry type etc). Thus this study has been tried to find out the relationship between the environmental reporting on corporate annual reports and profitability of listed companies in Dhaka stock Exchange.

### **METHODOLOGY OF THE STUDY**

The study is mainly based on secondary sources of information. The reason is that in our country the use of environmental accounting and reporting is rare and in most of the cases, the concept is vague. The environmental accounting practices followed by some developed countries have been studied to develop an idea of its applicability in our countries. To collect the data of the study, various published textbooks, related journals, reports, seminar papers, magazines and research works have been analyzed. Literatures were collected from the said sources and the internet. In addition, the annual reports published by our companies have been analyzed to collect information regarding the current status of environmental accounting practices & its disclosure and profitability of the companies.

#### Sample Selection

As the study is related to the environment, only manufacturing companies that are listed on the Dhaka Stock Exchange have been taken into account. The reason is that such companies have adverse impact on the environment. Although almost all of the companies (manufacturing and non-manufacturing) through their activities directly or indirectly affect the environment, the manufacturing companies are directly & seriously polluting environment by their production process, types of material used, disposal of wastages etc. In the study, 20 manufacturing companies of the following categories have been selected-

- i. Pharmaceutical & chemicals industries.
- ii. Food & allied industries.
- iii. Cement industries.
- iv. Ceramic industries.
- v. Textiles & Clothing industries.

A list of companies included in this study has been shown in Appendix A. The sample covers the annual reports of the said 20 companies for the year 2009 or 2010. Data for evaluating environmental information were extracted from corporate annual reports of the sample listed companies.

#### Information Items Included in the Environmental Disclosure Index

Disclosure Index Approach has been used to provide an evaluation of the environmental disclosure in corporate annual reports. The major task of the present study is to develop a suitable disclosure index comprising items of environmental information that are expected to be disclosed in corporate annual

report from the view point of Bangladesh. But there is a problem as to the measurement of corporate environmental disclosure. There is no generally accepted theory to predict user information needs and there is an absence of an appropriate generally accepted model for the selection of the items of environmental information to be included in a disclosure index. The items of environmental information included in the disclosure were selected from the study of Wiseman (1992), Porwal and Sharma (1991), and Singh, and Ahuja (1983). The list of this environmental disclosure information can be found as Appendix B. The disclosure index constructed for this study included 15 items, which were used in environmental index formulations.

### Scoring in the Environmental Disclosure Index

There are various approaches available to develop a scoring scheme to determine the disclosure level of corporate annual reports from the works of other researchers. Among the those approaches, unweighted disclosure index approach has been used to measure the extent of disclosure of environmental information where an item scores one if disclosed and zero if not disclosed. An unweighted environmental index is the ratio of the value of the number of items a company discloses divided by total value that it could disclose. Under an unweighted environmental disclosure index, all items of information in the index are considered equally important to the average user. In the unweighted environmental disclosure index, disclosure of individual items has been treated as a dichotomous variable. Here, the only consideration is whether or not a company discloses an item of environmental information in its corporate annual report. If a company discloses an item of environmental information in its annual report, it will be awarded `1' and if not it will be awarded `0'. The disclosure model for the unweighted environmental disclosure thus measures the total disclosure (TD) score for a company as additive as follows:

$$TD = \sum_{i=1}^{15} di$$

Where,

TD = Total Disclosure di = 1 if the item is reported and 0 if the item is not reported  $i = 1, 2, 3, \dots, 15$ 

# **Correlation Analysis**

The relationship between environmental disclosure and corporate profitability is arguably one of the most controversial issues yet to be solved. The results of different studies measuring such relationship show mixed results. Some researchers found a positive association between environmental disclosure and profitability whereas others found no association between the variables. In the present study, net profit margin has been used as the measures of profitability and to examine the relationship between the environmental disclosure in corporate annual reports and corporate profitability (net profit margin), Karl Pearson's correlation coefficient (r) has been computed.

# HYPOTHESIS

In this study, a simple hypothesis has been developed to test whether there is a positive relationship of environmental disclosure with profitability (net profit margin). Our hypotheses are as follows:

*Ho*: Companies with environmental disclosure have not higher net profit margin than companies without environmental disclosure.

*Ha*: Companies with environmental disclosure have higher net profit margin than companies without environmental disclosure. To test the hypotheses, *t*-test has been used in this study due to the size of sample, nature of variables and available information.

# ANALYSIS AND FINDINGS

The analysis and findings of the study are presented in this section. At first, the nature and extent of the corporate environmental disclosure has been analyzed and discussed. Secondly, the discussion on analysis of correlation co-efficient has been made and finally hypotheses testing, results and interpretation are presented. The *t*-test has been used to test the hypotheses of the study.

### Disclosure Levels by the Sample Companies in Bangladesh

Of the 20 sample companies, 9 companies (45 percent) disclosed environmental information on their annual reports. Out of these 9 companies, 4 (44.44 percent) companies belong to Pharmaceutical sector, 3 (33.33 percent) companies from Cement sector and 1 (11.11 percent) company from each of the two sectors such as Textiles & Clothing and Food & Allied sectors, disclosed environmental information on their annual reports. **Table-1** provides the sector-wise distribution of 9 companies.

### Table-1: The Sector-Wise Distribution of the Companies

No.	Name of Company	Sector	
1	Aramit Limited.	Cement	
2	Beximco Pharmaceuticals Ltd.	Pharmaceuticals & Chemicals	
3	British American Tobacco Bangladesh Co. Ltd.	Foods & Allied	
4	Confidence Cement Ltd.	Cement	
5	Heidelberg Cement Bangladesh Ltd.	Cement	
6	Malek Spinning Mills Ltd.	Textiles & Clothing	
7	Orion Infusion Limited.	Pharmaceuticals & Chemicals	
8	Square Pharmaceuticals Ltd.	Pharmaceuticals & Chemicals	
9	The IBN SINA Pharmaceutical Industry Ltd.	Pharmaceuticals & Chemicals	

The score received by all individual sample companies for disclosing their environmental information in corporate annual reports has been made in Appendix C. A summary descriptive statistics of disclosure score (DS) for the sample companies are provided in **Table 2**. The mean of the DS for 9 companies was 2.33 points, which indicates a very low level of corporate environmental disclosure by different listed manufacturing companies of Bangladesh. The standard deviation for 9 companies was 1.33 and their DS was ranged from 1 point to 5 points, indicating a medium variation in the disclosure level of corporate environmental information on corporate annual reports.

Table 2: Descriptive Statistics of Disclosure Score

No. of Observations	9
Mean	2.33
Standard Deviation	1.33
Maximum	5
Minimum	1
Range	4

Nearly 47 percent of the items included in the EDI were not disclosed by any of the reporting companies. Table 3 presents both disclosed and non-disclosed items of environmental information. Not a single company disclosed quantitative facts such as expenditure incurred or targets set and achieved. According to Table 3, all the companies have disclosed "environmental policies or company concern for the environment" on their annual reports (100%). Not a single company disclosed about water discharge or solid waste disposal information on the corporate annual reports. Out of 9 companies, 4 (44.44%) made

disclosure on their annual reports of how they controlled pollution of industrial process. Around 22.22 percent companies have disclosed on their annual reports whether they have air emission information or conserved natural resources. Approximately 11.11 percent companies have reported whether they have installed effluent treatment plant or financed for pollution control equipment or have forestation programs. An interesting finding of the study is that only 1 of the 9 companies obtained ISO 14001 certification.

Table 3: Disclosure and Non-disclosure of Items of Environmental Information by Sample Companies

Item No.	Items of Environmental Information	Disclosures (No. of Companies out of 9)	Percentage of Disclosures
1	Financing for pollution control equipment or facilities.	1.00	11.11
2	Air emission information.	2.00	22.22
3	Water discharge information.	0.00	0.00
4	Solid waste disposal information.	0.00	0.00
5	Environmental policies or company concern for the environment.	9.00	100.00
6	Conservation of natural resources.	2.00	22.22
7	Recycling plant of waste products.	0.00	0.00
8	Installation of effluent treatment plant.	1.00	11.11
9	Land reclamation and forestation programs.	1.00	11.11
10	Pollution control of industrial process.	4.00	44.44
11	Past and current expenditure for pollution control equipment and facilities	0.00	0.00
12	Past and current operating costs of pollution control equipment and facilities	0.00	0.00
13	Future estimates of expenditures for pollution control equipment and facilities	0.00	0.00
14	Research on new methods of production to reduce environmental pollution.	0.00	0.00
15	Obtaining certification for Environmental Management Systems/ISO 14001.	1.00	11.11

### Sample Companies With Their Disclosure Score & Net Profit Margin

The main focus of this study is to find out the relationship between the environmental reporting on corporate annual reports and corporate profitability. **Table 4** presents all individual sample companies with their disclosure score & net profit margin. According to table 4, companies without disclosure have insignificant net profit or net loss. On the contrary, none of the companies which have disclosed environmental information have suffered from net loss. Almost all of the companies with environmental disclosure.

To summarize, it can be said that companies with environmental disclosure have higher profit than companies without environmental disclosure. There are a lot of statistically significant tools to justify the relationship between corporate environmental reporting and profitability. In this study, the coefficient of correlation and hypothesis testing have been used.

# Correlation Analysis, Results and Interpretation

Of the several mathematical methods of measuring correlation, the Karl pearson's coefficient of correlation is most widely used in practice. It is used universally for describing the degree and direction of relationship between two variables. In this study, Karl pearson's coefficient of correlation has been used to determine the degree and direction of relationship between the environmental disclosure in corporate annual reports and corporate profitability (net profit margin). The result of the correlation is 0.45 which indicates that there is moderate degree of positive correlation between the environmental disclosure and net profit margin. That's the direction of relationship between environmental disclosure and net profit margin is positive (i.e. if one variable increases, other will also increase & vice versa) and the degree of relationship is moderate level.

No.	Name of companies	Disclosure Score	Net profit Margin
1	Heidelberg Cement Bangladesh Ltd.	5	12.00%
2	Beximco Pharmaceuticals Ltd.	3	16.20%
3	British American Tobacco Bangladesh Co. Ltd.	3	11.77%
4	Orion Infusion Ltd.	3	5.58%
5	The IBN SINA Pharmaceuticals Industry Ltd.	3	3.74%
6	Square Pharmaceuticals Ltd.	1	18.80%
7	Aramit Cement Ltd.	1	14.55%
8	Confidence Cement Ltd.	1	14.02%
9	Malek Spinning Mills Ltd.	1	7.89%
10	Square Textiles Ltd.	0	6.71%
11	Reckitt Benckiser(Bangladesh) Ltd.	0	6.16%
12	Fu-Wang Foods Ltd.	0	4.97%
13	Beximco Synthetics Ltd.	0	1.47%
14	Fu-Wang Ceramic Industry Ltd.	0	0.82%
15	Tallu Spinning Mills Ltd.	0	0.67%
16	Monno Ceramic Industries Ltd.	0	0.47%
17	Apex Foods Ltd.	0	0.39%
18	Monno fabrics Ltd.	0	-26.22%
19	Lafarge Surma Cement Ltd.	0	-28.97%
20	Zeal-Bangla Sugar Mills Ltd.	0	-29.59%
	TOTAL	21	41.43

Table 4: List of Sample Companies with their Disclosure score & Net profit margin

# Hypothesis Testing, Results and Interpretation

In this study, the *t*-test has been used to test the hypothesis whether companies with environmental disclosure have higher net profit margin than companies without environmental disclosures. As Ha is one-sided, one tailed test has been applied for determining the rejection region at 5 percent level of significance which comes to as under, using table of *t*-distribution for 18 degree of freedom:

R: t > 1.734 The computed value of t is 3.372 which fall in the rejection region and thus the null hypothesis (*Ho*) is rejected and alternative hypothesis is accepted. So it can be concluded that companies with environmental disclosure have higher net profit margin than companies without environmental disclosures. In the study, it has been observed that among 9 companies (which have disclosed environmental information) all have net profit during the surveyed financial year. On the contrary, among the rest 11 companies (which have not disclosed environmental information) 3 companies have shown net loss and 4 companies have showed very little net profit (less than 1%).

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

Though corporate environmental reporting is not mandatory at present in Bangladesh, out of 20 sample companies 9 companies have disclosed environmental information voluntarily in their annual reports. That means 45% companies have disclosed environment related information. But the study also shows that on average only 2.33% of environmental information have been disclosed by the sample companies in their corporate annual reports and no company has disclosed quantitative information which is very disappointing as compared with the developed and some developing countries. Thus it can be concluded that environmental reporting in Bangladesh is still in its infancy and is in need of further development. This paper has reported the results of correlation-coefficient and a simple hypothesis test (*t*-test) to show the association between corporate profitability and the extent of environmental disclosure in corporate annual reports for Bangladesh. The result of correlation-coefficient shows that there is a moderate degree of positive correlation between them and the *t*-test result represents companies with environmental reporting. In order to improve the situation of environmental reporting in Bangladesh, following recommendations have been offered and they are as follows:

- Companies have been found to disclose only qualitative information about their environmental activities. They should also provide quantitative environmental information such as the amount of fines for noncompliance, the amount spent on tree plantation, the quantity of energy saved, the quantity of CO2 emitted etc.
- Companies have provided only positive information about their environmental activities. They should also provide negative information so that the information has decision-usefulness for information consumers.
- It has been found that there are inadequate laws, rules and guidelines on corporate environmental reporting and disclosure. Laws, rules and guidelines are needed to be developed.

This study considers the annual reports for a single year. Further research can be undertaken to measure the extent of environmental disclosure longitudinally to determine whether quality of disclosure has improved over time. Such a study would provide additional insights on corporate disclosure practices in Bangladesh. This study does not concentrate on any particular industry type. Further research can be undertaken based on particular industry type (e.g., the pharmaceutical industry and textile industries in Bangladesh). This study concentrates only on the relationship between environmental reporting and profitability. Further research can be undertaken based on relationship between environmental reporting and severe corporate attributes (such as age, size, efficiency, profitability, multi nationality, industry type etc). It should be noted that the number of environmental disclosure items was limited to 15 items and the results may be different if the numbers of environmental information were increased or another set of environmental disclosure items was examined. It should also be noted that the number of sample companies was more. As always, much more research is needed if we are to contribute to more environmentally responsible corporate practices in all corners of the world.

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# APPENDIX

Score Received by the Sample Companies along with Percentage of Disclosure

Sl. No	Name of the companies	No. items Disclosed	Percentage of Disclosure
1	Apex Foods Ltd.	0.00	0.00
2	Aramit Limited.	1.00	6.67
3	Beximco Pharmaceuticals Ltd.	3.00	20.00
4	Beximco Synthetics Ltd.	0.00	0.00
5	British American Tobacco Bangladesh Co. Ltd.	3.00	20.00
6	Confidence Cement Ltd.	1.00	6.67
7	Fu-Wang Ceramics Industry Ltd.	0.00	0.00
8	Fu-Wang Foods Ltd.	0.00	0.00
9	Heidelberg Cement Bangladesh Ltd.	5.00	33.33
10	Lafarge Surma Cement Ltd.	0.00	0.00
11	Malek Spinning Mills Ltd.	1.00	6.67
12	Monno Ceramic Industries Ltd.	0.00	0.00
13	Monno Fabrics Ltd.	0.00	0.00
14	Orion Infusion Limited.	3.00	20.00
15	Reckitt Benckiser (Bangladesh) Ltd.	0.00	0.00
16	Square Pharmaceuticals Ltd.	1.00	6.67
17	Square Textiles Ltd.	0.00	0.00
18	Tallu Spinning Mills Ltd.	0.00	0.00
19	The IBN SINA Pharmaceutical Industry Ltd.	3.00	20.00
20	Zeal Bangla Sugar Mills Ltd.	0.00	0.00

# THE CURRENT AND FUTURE STATES OF LIFO AND AVAILABLE TAX OPPORTUNITIES

Peter Harris, New York Institute of Technology William Stahlin, Stevens Institute of Technology Liz Washington Arnold, The Citadel

### ABSTRACT

The Last in First out Method (LIFO) is presently under severe scrutiny from the financial community, which may soon culminate in its repeal as an acceptable accounting method. There are pressures from the International Financial Accounting Standards Board to standardize accounting standards worldwide. In addition, there is political pressure imposed by US Congress to raise additional revenues. Both groups strongly oppose LIFO, raising the possibility of its complete elimination as an acceptable accounting method. However, adverse economic and political events in 2011 and again in 2012 have greatly renewed the lifeline of LIFO indefinitely. In the unlikely case of its ultimate repeal, the author presents some tax opportunities available in this transition period.

KEYWORDS: LIFO, LIFO Reserve, IFRS, US GAAP, FIFO.

# **INTRODUCTION**

At present, LIFO faces a possibility of its elimination by the year 2015, as political forces coming from the International Financial Accounting Standards Board, the world financial community and the US administration strongly oppose this method. The International Financial Reporting Standards (IFRS) prohibits LIFO as an acceptable accounting method, and the Obama administration proposed in its 2010 budget to repeal LIFO altogether in the future. However, given new developments against Senator Rangel, LIFO's biggest critic and the renewed worldwide recession, as well as an unprecedented report by the SEC , which avoided a critical due date of convergence , LIFO's repeal is now very unlikely. This paper will examine the current and future states of LIFO and available tax opportunism assuming the unlikely repeal of LIFO.

# **CURRENT STATE OF LIFO**

LIFO was facing pressures from both: the International Reporting Standards Board in cooperation with the SEC and the U.S. Congress for its possible complete elimination by the year 2014. On June, 18, 2008 the SEC issued a press release stating that the world's securities regulators are uniting to increase their oversight of international accounting standards. There are plans set forth by the SEC and the IFRS to standardize accounting standards, on a worldwide basis with a target date set for periods ending after December 31, 2014. Under IFRS rules, LIFO is not a permitted acceptable accounting method. IFRS is balance sheet oriented and on this basis, disallows LIFO as an inventory method. The use of LIFO disrupts the theoretical foundation of the IFRS. More importantly is the current tax position on LIFO. The Obama Administration has proposed in its 2010 budget to repeal LIFO altogether in an attempt to generate greater tax revenues.

Recently in 2010, Senator Rangel, the biggest political critic of LIFO was brought up on a number of ethical violations. This in effect has pushed LIFO repeal backwards and has at best delayed its possible repeal. Additionally, the economic crisis has resumed unexpectedly in 2011 as the pale state of the economy was announced, which was contrary to the belief that it was in a recovery stage. Most significantly in 2012 the SEC announced that it has no target date if any for IFRS convergence in the US

and expressed major constraints if plans for convergence were to continue. Clearly, the SEC is in no rush and non-enthusiastic about convergence, which is not likely to happen anytime in the intermediate future. These developments have put LIFO repeal on the backburner and the result is that the political pressures against LIFO have eased in a significant manner and the likelihood of its eventual repeal now is very unlikely

#### THE FUTURE OF LIFO

There are four possibilities o	f LIFO going forward, and illustrated as follo	DWS:
Case	Financial Reporting Purposes	Tax Purposes
1	Yes	Yes
2	No	Yes
3	Yes	No
4	No	No

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

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

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

Case 4 represents the complete elimination of LIFO. This will only occur if LIFO is eliminated at the tax level. If so, then it will be eliminated for financial reporting purposes, as the advantage for business purposes would not exist. Given the SEC's non commitment to IFRS adaption in the US, the spiraling US deficit which now exceeds 16 trillion Dollars, LIFO is safe and unlikely that any repeal will occur in the future. In addition, the continuing worldwide economic problems, LIFO at this time is just a footnote for the US regulators, similar to the second term of then President Bush, which leads us to predict that this issue will not be addressed well beyond the 2012 election. Our prediction then is a status quo on LIFO at this time and in the near foreseeable future.

# TAX PLANNING OPPORTUNITIES AVAILABLE FOR THE CURRENT USERS OF LIFO

Assuming the repeal of LIFO, which seems very unlikely, what are some of the tax planning opportunities available to taxpayers to help ease in this transition?

Extended Payment Adjustment Period: Under current tax rules, if a taxpayer charges its accounting period form LIFO to another acceptable method, and it results in a higher inventory value, the difference in additional tax is payable over a period of four years. Under the current Obama Administration's 2010 Budget Proposal, which would eliminate LIFO, the difference would be spread to taxable income and payable over eight years. Consequently, the termination of LIFO would be mitigated as the resulting extra tax would be payable to the tax authorities over an eight year period.

# CONCLUSION

Given the worldwide continued recession, political concerns, spiraling US Deficit and most importantly, the SEC's non commitment to US IFRS compliance, LIFO is insulated from the possibility of repeal in the indefinite future. In the authors' opinion, the status quo of LIFO in the US will continue.

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# ABSTRACT

It is well known that Mathematical Programming techniques are well-developed and with widespread application. It would be useful for researchers and practitioners in the information systems field to have a categorization that would show the types of problems that have been solved using these techniques. This paper provides this categorization

# INTRODUCTION

Application of business, financial and economic problems to mathematical programming is of ongoing interest. Users include insurance companies, mutual funds, farmers and shipping companies. Mathematical programming is used when an optimization decision has constraints that limit decisions. For example, a business may use mathematical programming to allocate scarce resources in an optimal way, an insurance company may be required to keep a small percentage of its assets in treasuries and another percentage in fixed income securities and a farmer's crops may require a minimum amount of fertilizer. Much research has been conducted to make the solving of linear programs more efficient [7, 8, 20, 21, 25]. Applications of these optimization problems extend over many fields. For example, in the fields of economics and finance, linear programming may be applied to production problems, shipping problems, asset allocation, crop growing, allocation of sewage, mortgage backed securities portfolios other similar problems [1, 2, 3, 4, 5, 6, 10, 11, 13, 14, 15, 16, 17, 18, 19, 22, 26, 27, 28].

We have written papers on the topics that encompass this research: mathematical programming, asset allocation models, the sub-prime mortgage problem and even applying linear programming to parallel computers [23, 24, 25]. It is well known that Mathematical Programming techniques are well-developed and with widespread application. It would be useful for researchers and practitioners in the information systems field to have a categorization that would show the types of problems that have been solved using these techniques. This paper provides this categorization.

# BACKGROUND

Linear Programming (LP) has been said to be one of the ten most important discoveries of the last century [9, 12]. Many fields including the fields of micro-economics and finance have been impacted directly as both private business and governments have made use of Linear Programming. Its use in the production and allocation of resources cannot be underestimated.

# Linear programming formulation

Figure 1 Where cj, aij and bj, are coefficients and xj are the variables to be solved for j=1..n and i=1..m. Definition: A constraint is a row of a linear program that restricts the variables to values that would not violate the expression. Definition: A feasible solution x is a set of xj, j=1..n that satisfy the constraints.

Definition: An optimal solution x is a set of xj, j=1..n that both satisfy the constraints and maximize the function in figure 1.

A standard LP formulation is of the form	l
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Maximize	<b>c</b> <sub>1</sub> <b>x</b> <sub>1</sub>	$+c_{2}x_{2}$	$+c_{3}x_{3}$	•••	$+c_n x_n$		
Subject to constraints	$a_{1,1}x_1 \\ a_{2,1}x_1$	${}^{+a_{1,2}x_2}_{+a_{2,2}x_2}$	$+a_{1,3}x_3 +a_{2,3}x_3$		$\begin{array}{c} +a_{1,n}x_n \\ +a_{2,n}x_n \end{array}$	<u>&lt;</u>	$egin{array}{c} b_1 \ b_2 \end{array}$
	$a_{m,1}x_1$	$+a_{m,2}x_2$	$+a_{m,3}x_3$		$\begin{array}{c} \dots \\ +a_{m,n}x_n \\ x_i \geq 0 \end{array}$	$\frac{\leq}{(j=1,2)}$	 b <sub>m</sub> n)

OR

 $\begin{array}{ll} \textit{Maximize } \sum\limits_{j=1..n} {}^{C} j^{X} j \\ \textit{subject to } \sum\limits_{j=1..n} {}^{A} i j^{X} j \leq b_{i} \quad \textit{for all } i \quad (i=1,...,m) \\ & x_{j} \geq 0 \text{ for all } j \quad (j=1,...,n) \end{array}$ 

# General Production Problem

Suppose a manufacturer manufactures j products where each product yields a known profit. Suppose further that there are i resources necessary in the production of all the products and there is a known limit on the amounts of each resource. The problem to be solved is: how many of each of the products should be produced to maximize profit.

#### Production Example

Suppose a furniture company manufactures two items: wooden chairs and beds. The company employs workers skilled in carpentry, painting and upholstery. Suppose that the number of hours of skilled labor and profit per item are as defined in table 1.

	Chair	Bed	Available labor	
Carpentry	6	3	48	
Painting	1	1	6	
Upholstery	2	6	36	
Profit	\$80	\$70		

Constraints and Optimization Coefficients for the Production example

Table 1 From the table one notes that 6 hours of carpentry work are needed per chair and 3 hours are needed per bed. There is a maximum of 48 carpentry work hours available. Interpretation of the other rows is analogous. We know too, that for each chair and bed manufactured one will earn \$80 and \$70 respectively.

#### Linear Program for Production Example

This may be described as the LP problem:

Maximize	80x1	$+70x_{2}$		
Subject to	6x1	$+3x_{2}$	<u>&lt;</u>	48
constraints	$\mathbf{x}_1$	$+x_2$	<u>&lt;</u>	6
	$2\mathbf{x}_1$	$+6x_{2}$	<	36
		$x_1, x_2 \ge 0$		

# **Economic Interpretation**

The economic interpretation is straightforward. We wish to determine the number of chairs  $(x_1)$  and beds  $(x_2)$  to manufacture per day to enable maximization of profits without exceeding available resources. The company is constrained by the number of work-hours per skill to which it has access. We examine table 1 on a row by row basis. We wish to know how many chairs  $(x_1)$  and beds  $(x_2)$  to produce in order to maximize the profit  $80x_1+70x_2$ . We must be careful not to violate the constraints designated by the rows:

(9 carpenter-hours) $x_1$  +(3 carpenter-hours) $x_2 \leq 48$ 

(1 painting-hour) $x_1$  +(1 painting-hour) $x_2 \leq 6$ 

(2 upholstery-hours) $x_1$  +(9 upholstery-hours) $x_2 \leq 36$ 

# CONCLUSION

Mathematical Programs which in Linear and nonlinear Programs can be an important tool for information system professional to help businesses, organizations grow. As already indicated, in addition to production problems, optimization techniques are used to solve shipping problems, asset allocation, crop growing, allocation of sewage, mortgage backed securities portfolios and many others. Linear programs also occur frequently in such other important applications as wavelet decomposition, digital filter design, text categorization, image processing and relaxations of scheduling problems. We presented in this abstract a simple example, but the number of real applications is vast. In this research we are categorizing and analyzing these applications so that practitioners can use this categorization as a guide to applying proper optimization techniques to their own problems.

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# CHAIN COORDINATORS' LEADERSHIP STYLES AND COORDINATION EFFECTIVENESS: SELECTED AGRI-FOOD CHAINS OF UK IMPORTERS

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# ABSTRACT

The application of suitable leadership styles and consideration of certain dimensions (operational and social outcomes) are pivotal tools for chain coordinators (CEOs, managing directors and head of departments) to achieve coordination success. The linkages are scrutinized by applying structural equation modeling to the data collected from UK's selected agri-food supply chains (dairy, meat, apples, onions and wine). The findings suggest that chain coordinators' participative leadership style is significantly correlated with the effectiveness of supply chain coordination (operational, social and financial performance). Moreover, operational (service and product quality) and social (satisfaction with/trust in supply chain partners) outcomes are found to be important determinants of financial performance. This empirical investigation enhances the understanding of chain coordinators and thus contributes to determine best practices for modern agri-food supply chains.

Keywords Chain coordinators, leadership styles, agri-food chains, UK, SEM

Paper type Research paper

# **INTRODUCTION**

eadership styles consist of complex social processes rooted in chain coordinators' ways of leading and directing (Gallos and Heifandetz, 2008). Two commonly used leadership styles, namely participative and directive, are often employed to oversee the performance or operation of a person or group of people. The former encourages the participation from team members and shares decision power with work colleagues. The latter applies command-and-control rule that replicates directive practices (Akhtar et al., 2011).

Researchers (Mehta et al., 2003; Akhtar et al., 2011) have recognized a significant links between leadership styles and performance. The sharing of decision making power and participation from subordinates seem to be an essential component of modern agri-food supply chain performance. For example, <u>Pfeffer (1998)</u> stated that a firm reduced 38% defect rates by using participative approach, as a consequence, it increased productivity by 20% (<u>Pfeffer, 1998</u>), In support, Mehta et al., (2003) and Akhtar et al. (2011) believed that outcomes can be more effective when a participative leadership styles is used rather than directive leadership practices.

A participative leadership style also assists chain coordinators (CEOs, managing directors, head of departments – supply chain/marketing/channel/chain mangers) to achieve the effectiveness of coordination (Akhtar et al., 2012a). Chain coordinators are defined as the major decision makers who lead, direct and control chain activities (Akhtar et al., 2012a; Akhtar et al., 2012b). Their job is rooted with a complex business activities and the implementation of a suitable leadership style can have remarkable impact on the coordination effectiveness of selected agri-food chains i.e., dairy, meat, apples, onions and wine (Akhtar et al., 2012a).

The coordination effectiveness is defined as a synthesis of operational performance (service and product quality), social performance (satisfaction with and trust in supply chain partners) and financial

performance (profit, sales and market share). The contribution of a particular leadership style to the individual components of the effectiveness of coordination has been highlighted in a number studies (Mehta, 2003; Kruglanski et al., 2007; Akhtar et al., 2011).

However, despite the stronger evidence reported in the literature in the favor of participative leadership approach, it is still not clear which leadership styles is more appropriate in certain chains such as selected agri-food chains (dairy, meat, apples, onions and wine) of UK importers (Akhtar et al., 2012a). Although studies such as Akhtar et al. (2012a; 2012b) identified chain coordinators, they did not systematically investigate the impact of leadership styles on the effectiveness of coordination and the linkages between the dimensions (operational, social and financial). Thus, by testing the proposed theoretical models, this study answers two questions:

*Question 1:* Which leadership style (participative or directive) is highly significant in selected agri-food chains?

Question 2: How are the dimensions of coordination effectiveness related?

This article is organized in five sections. Following the introduction, the second section presents research hypotheses and two conceptual models. The third section outlines the data collection procedure and the exploratory statistical analysis. Section four describes the main results. This article is concluded by section five which concisely discusses the findings and managerial implications.

#### Theoretical Background And Hypotheses

A participative leadership style focuses on the empowerment of team members. It has been a vital part of the coordinators' tool-kit to handle modern agri-food supply chains. On the other hand, a directive leadership style is closely associated with hierarchical management system and clearly gives directions about the duties and rights of subordinates (Kruglanski et al., 2007). The effectiveness of supply chain coordination depends on the adoption of a suitable leadership that fastens front line workforce, board level and trade unions into a connected unit (Jung et al., 2003). A study conducted by Mehta (2003) in USA, Finland and Poland clearly showed a positive relationship between workers' decision-making participation and performance. Leadership that emphasizes the participation of employees and treat them fairly provides maximum coordination effectiveness. A significant positive relationship was found between the leadership style and effects on the shop floor behavior.

The study which included multiple industries such as food, retail, logistics service, IT, automotive and pharmacy was conducted in the Netherlands (Leeuw and Berg, 2011). The key benefits and the higher levels of trust in and satisfaction with supply chain partners are associated with the participation from team members rather than traditionally designed teams (Akhtar et al., 2012). The effective coordination outcomes such as good relationships, high service quality, increased market share and growth in sales are the results of satisfied and trusted chain partners. An increase in these outcomes means that they can be motivated for the growth of their businesses and it totally depends on fair and equitable dealing and rational leadership practices (DeConinck, 2010). From the above discussion, the following hypotheses are proposed:

- H1: Chain coordinators' participative leadership style is significantly correlated with the effectiveness of supply chain coordination.
- H2: Chain coordinators' directive leadership style is significantly correlated with the effectiveness of supply chain coordination.

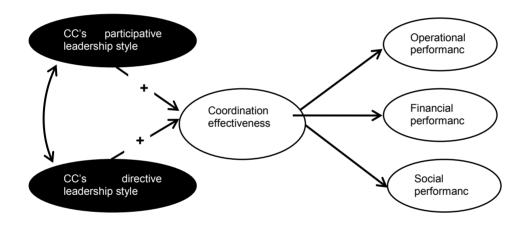
The dimensions of coordination effective consist of operational performance (relative service and product quality), social performance (satisfaction with and trust in supply chain partners) and financial performance (relative profit, sales and market share). The linkages between theses dimensions have also

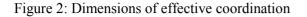
been partly highlighted in a number of studies. For example, an empirical study of over 200 US manufacturing firms stated a significant positive relationship between service quality and financial performance (Lado et al. 2011). Moreover, researchers (Aramyan et al., 2007) suggested that factors related to service and product quality (delivery on time, order flexibility and fulfilling 100% orders without defective products) are the key operational outcomes that increase profit, sales and market share (Chen and Paulraj, 2004; Aramyan et al., 2007). In support, Akhtar et al. (2011) also provided evidence that service quality significantly affect financial performance. The above discussion directs towards the following hypotheses.

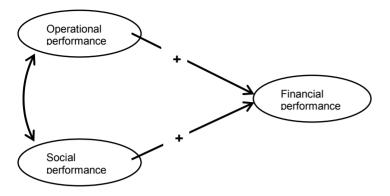
- H3: Operational performance significantly influences financial performance.
- H4: Social performance significantly influences financial performance.

In summary, the conceptual models shown in Figures 1 and 2 depict the factors and their interrelationships which are argued above. The leadership styles are the determinants of the effectiveness of supply chain coordination. Moreover, it is assumed that the operational and social outcomes are significantly correlated with financial performance.

Figure 1: Leadership style model







1. Data collection and analysis method

3.1 Sample procedure: The UK importers of agri-food products (dairy, meat, apples, onions and wine) listed in the KOMPASS database were selected. Five-point Likert scales (strongly disagree = 1 and strongly agree = 5) were employed to facilitate chain coordinators to state their degree of agreement or disagreement. After developing the questionnaire it was tested on identified chain coordinators. A total of 675 questionnaires were sent to chain coordinators in September 2012. After excluding the unusable responses (eight), 112 questionnaires yielded a response rate of 17%. A number of efforts were made to increase the response rate and finally enough sample size was achieved to apply structural equation modeling.

*3.2 Measures:* Each construct consists of three measures (items) except of product quality and satisfaction – each was assessed using four items. *Participation and directive leadership styles* were assessed by the items taken from a study conducted by Mehta et al. (2003). *The effectiveness of supply chain coordination*, the dependent variable, was measured by five constructs – service quality, product quality, financial performance, trust and satisfaction. The items for these constructs were adopted from the previous studies (Cullen et al., 1995; Amoaka-Gyampah, 2003; Batt, 2003; Acquaaah, 2007; Aramyan et al., 2007; Akhtar et al., 2012a).

3.3 Data analysis: The statistical tests showed that the data met the distributional assumptions (means/medians comparisons; skewness and kurtosis within the suggested limits). The (exploratory) factors were extracted by using recommended eigenvalues  $\geq 1$ . The scree plots were also observed to select the factors. During the process, one item for product quality (item4) was deleted because it had low loadings on its intended construct. Moreover, Cronbach  $\alpha$  values were larger than the recommended value of 0.7 and thus confirmed the reliability (Kline, 2011).

A two-stage approach was used to perform SEM. The first stage assessed the measurement models and the second stage estimated hypothesized relationships. The measurement models were tested for validity. The loadings, construct reliability and average variance extracted were more than satisfactory. Additionally, the correlation between the respective constructs did not exceeded threshold value of 0.85 which means the items assessed different constructs. Moreover, discriminant validity was also checked by estimating whether the average variance explained (AVE) for each pair of constructs was greater than the square of the correlation between the constructs. Thus, the measurement satisfied validity criteria (Aggelidis and Chatzoglou, 2008; Kline, 2011). Also, parceling (averaging item scores for a respective factor) strategy was used to reduce the number of indicators and achieve the main purpose of this study

# SEM Results

The structural results estimated for leadership model are shown in Figure 3 which provides the standardized coefficients and  $R^2$  values. It can be seen that *CCs' participative leadership style* ( $\beta = 0.62$ ; p = 0.00) is an important determinant for the effectiveness of supply chain coordination. Moreover, both variables (participative and directive leadership styles) explain 38% of the variance in the effectiveness of supply chain coordination.

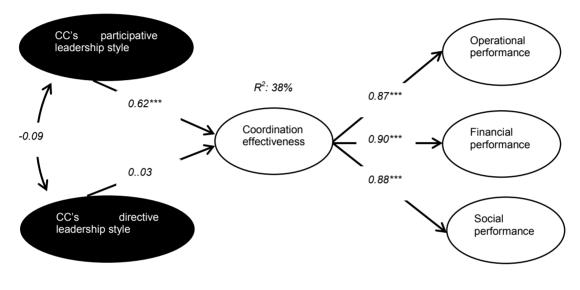


Figure 3: SEM results for leadership styles

\*\*\* statistically significant at p < 0.01; n = 112

Figure 4 shows the linkages between the dimensions of coordination effectiveness. *Operational (service and product quality) and social (trust in and satisfaction with chain partners) outcomes* seem equally important for financial performance ( $\beta = 0.43$  and p = 0.00) and together explain 68% of variance in the financial performance with a strong bivariate correlation ( $\beta = 0.79$ , p = 0.00).

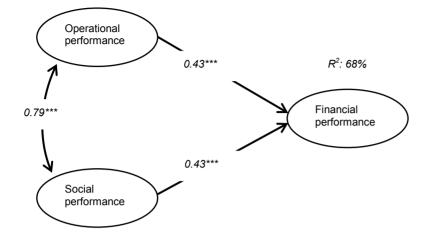


Figure 4: SEM results dimensions of coordination effectiveness

\*\*\* statistically significant at p < 0.01; n = 112

The results are also supported by the models' fit measures which are given in Table 1. Turning to the research questions and hypotheses, a summary of the hypotheses that answer the research questions is provided in Table 2. Hypotheses 1 and 2 resulted that leadership style (participative or directive) is highly significant. Hypotheses 3 and 4 address question two and concluded that operational and social performances significantly influence financial performance.

Table 1: Suggested and resulted fit indexes

Fit indices	Suggested values	Leadership model
$\chi^2$	-	61.53
Degree of freedom (df)	_	59
$\chi^2/df$	< 5	1.04
<i>P</i> value	> 0.05	0.39
Comparative fit index (CFI)	> 0.95	0.99
Incremental fit index (IFI)	> 0.95	0.99
Tucker Lewis fit index (TLI)	> 0.95	0.99
Root mean square error of approximation (RMSEA)	< 0.06	0.02

Source: Pandey and Jha (2012), Kline, 2011 and results of this study

Table 2: Hypotheses and questions summary

Hypotheses	Supported(yes/no)	Questions
1: Chain coordinators' participative leadership style is significantly correlated with the effectiveness of supply chain coordination.	Yes	1: Which leadership style (participative or directive) is highly significant in selected
2: Chain coordinators' directive leadership style is significantly correlated with the effectiveness of supply chain coordination.	No	chains?
3: Operational performance significantly influences financial performance.	Yes	2: Question 2: How are the dimensions of
4: Social performance significantly influences financial performance.	Yes	coordination effectiveness related?

# **CONCLUSION AND MANAGERIAL IMPLICATIONS**

This research investigated the impact of chain coordinators' leadership styles on coordination effectiveness and the linkages between the dimensions. The findings support other studies which

suggested that participative leaderships style is more effective than directive leadership approach (DeConinck, 2010; Leeuw and Berg, 2011; Akhtar et al., 2012a). Participative leadership style seems to be the future of modern agri-food supply chains where workforce is more knowledgeable. The results also suggest that the concepts of operational and social performance are becoming more important to achieve financial objectives. Thus, financial and non-financial outcomes simultaneously work together and that is a message that chain coordinator should consider to achieve the effectiveness of performance dimensions.

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# THE IMPLEMENTATION OF VALUE NETWORK SCORECARD: CASE CROSS-SECTOR COLLABORATION IN ELDERLY CARE

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# ABSTRACT

In this case study we implement a tool for performance measurement and performance prediction in collaboration, namely the Value Network Scorecard, using value network mapping. Generally, the aim of collaboration is to get benefits and to absorb value from other participants. Furthermore, the need of collaboration starts from the multitude of challenges and the aim of solving them efficiently. The case study starts from identifying challenges in elderly care and then trying to find solutions to solve the challenges efficiently. Efficiency means here creating value to other participants. In order to create value, must be identified which collaboration participant has the best capabilities to perform specific tasks while finding solutions to solve the challenges. The task of performance measurement uses the value network mapping, which helps in assigning and defining roles for the participants in collaboration process. The data was gathered through a workshop with key representatives from public, private and third sectors involved in welfare services delivery for elderly. Understanding how Value Network Scorecard can be applied in practice will help the managers to improve collaboration, to create new value in network, to assign roles for every collaboration participant and to follow easily the performance of duties.

**KEYWORDS:** performance measurement, performance prediction, value network, cross-sector collaboration, elderly care

# INTRODUCTION

Collaboration and partnerships have become crucially important in order to succeed in the today's dynamic environment (Camarinha-Matos and Afsarmanesh 2006). Social domain faces with many different kinds of challenges that cannot be solved by a single organization. Collaboration with people from different domains which have different kind of expertise it is very important (Alter and Hage 1993; Zuckerman et al. 1995). People and organizations must be motivated to get involved and to be fully committed in collaboration process (Hansen 2009). Being aware of the benefits they could get from collaboration could be a good motivator factor in that sense. Acquiring benefits, as well as offering value to other network participants represents the value network: the amount of value that is created in the network to all its participants during the collaboration process.

Elderly care has become one of the biggest challenges in modern society. In the developed countries, the amount of aged population has increased continuously, while the amount of active population has decreased (Selsky and Parker 2005). In Finland the situation is even more challenging. According to Statistics of Finland (2009), the proportion of the Finnish population aged over 65 years is currently 17% of the whole population. It is estimated that by 2030 the aged population will rise up to 27%. The finish government strategy is to provide welfare services to elderly people, so that they can live as long as possible in their own homes, because enhanced services in specialized rest homes are much more costly (Bakker et al 2003). As in any other social domain that faces challenges, collaboration with organizations from different sectors is crucial in order to be able to solve the multitude of challenges in this area.

In order to collaborate efficiently there is a need to manage collaboration in a powerful way. While managing collaboration, besides strategy and planning, performance measurement is one of the important issues of management (Varamäki et al, 2008). Powerful performance measurement tools have to be used in that sense (Yeniyurt, 2003). Different kind of tools for performance measurement have been developed over the years, but still a lot of gaps exist in the performance measurement systems: they lack the ability to predict and explain future performance, they do not consider intangible assets, neither measure the value created (Yeniyurt, 2003; Hatry, 2010). The Value Network Scorecard, is a tool for performance measurement that overcomes these gaps. It measures and predicts the performance, evaluating how new value can be created in collaboration process.

In this article we show how Value Network Scorecard can be used in practice. We exemplify step by step how performance can be measured and predicted in collaboration, using a case study in cross-sector collaboration for elderly care in Finland. In the next section we present a theoretical background for the topic, explaining in detail the elements of Value Network Scorecard. Section three consists of explanations related to data and the methods used in this study. Fourth section illustrates how to use Value Network Scorecard in practice and finally, the discussions and conclusions are outlined.

# THEORETICAL BACKGROUND

#### Performance Measurement And Value Network

Performance measurement is the process that helps organizations to establish criteria for determining the quality and outcomes of their activities, based on organization's vision or its goals (Kaplan and Norton, 1996; Gates, 1999; Forza and Salvador, 2000). It's about creating an effective and simple tool that allows organizations to follow whether the objectives are meat. Performance measurement development starts by defining the vision and strategic goals (Kaplan and Norton, 2001). For a business organization the most important goal is turning a profit, but for public and third sector organizations the key objectives may be difficult to define. When organizations from different sectors of activities (e.g. public, private and third sectors) collaborate, determining the common goal and objectives may be quite a challenging task (Bryson et al., 2006). Furthermore, designing a performance measurement tool for collaboration is a more complicated task, because it involves a lot of complex issues.

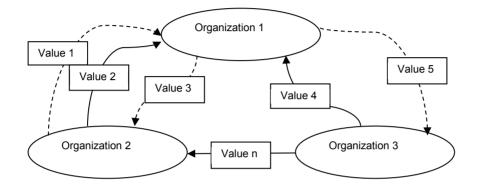
Measuring complex issues in a simple and effective way is also challenging. When defining the performance measurement Moullin (2003) adopted a little different approach, arguing that performance measurement is evaluating how well organizations are managed and also, what is the value the organization delivers to its customers and stakeholders. Starting from this idea The Value Network Scorecard is a performance measurement tool that evaluates what value can be created in collaboration process to customers, as well as to all collaboration (network) participants, or with the other words, how the value network can be enhanced during the collaboration process. To understand the idea of Value Network Scorecard (which will be described in the next chapter) the concept of value network is shortly introduced. According to Allee (2002) value network is a web of relationships between individuals or organizations that generate tangible and intangible value through their complex dynamic exchanges. The value network can be illustrated easily using a map (Allee, 2006) where can be seen what is the value exchange between network participants (Fig.1).

When drawing the map, the participants in the collaborative network are indicated with ovals and with arrows are indicated the value-attributes (see Fig.1). For value there are used two different types of lines in the map: dotted lines indicate intangible value-attributes (e.g., knowledge, experience) and dash lines tangible value-attributes, respectively (e.g., goods, services, money).

The direction of the arrow indicates to whom network participant is generated a certain value and the starting point of the arrow indicates which network participant generates the specific value. In the rectangle is labeled the value. In the picture with the example of value network map (Fig.1) *"Value 1"* is

an intangible value offered by "Organization 2" to "Organization 1". More concretely it means that during the collaboration process "Organization 2" offers (generates) some value (e.g., knowledge about customer needs) to "Organization 1". Alternatively, "Organization 1" offers "Value 3" to "Organization 2". Value-attributes can be simply associated to benefits. Therefore during collaboration process network participants get benefits from other participant. This is the glue of collaboration. Without getting any benefits, the motivation to collaborate will be very low, or inexistent. In the next section we'll see how these two concepts (value network and performance measurement) are linked together.

Figure 1: Value network map overview (based on Allee, 2006)



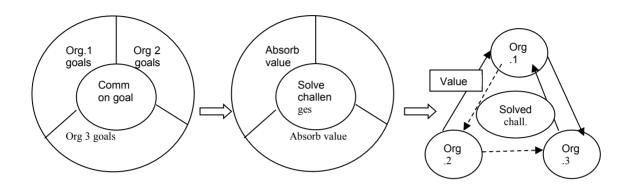
# Value Network Scorecard: A Tool For Performance Measurement And Performance Prediction

Following we describe in details what the main components of Value Network Scorecard are. Value Network Scorecard is a tool for performance measurement and performance prediction developed by our team. It was designed to measure the performance of collaboration and it is a value network approach. The measurement and the prediction of performance have as the core concept the value network. The main idea is how collaboration should be managed in order to create value to all network participants. Going back to performance measurement in collaboration, it has been seen that the designing of performance measurement tool starts from the vision and the goals of collaboration (Bryson et al., 2006). When organizations engage in collaboration, any of them aims to fulfill the own goals, but the same time a common goal should bring them together. These two different types of goals should be embedded in the vision of collaboration, at the strategic level (Jap 1999; Hansen 2009). Usually the common goal that encourage organization to engage in collaboration process is solving specific challenges; and every organization's own goals are different kind of benefits they want to acquire from collaboration, so absorbing value from others, in other words. Therefore at the strategic level managers should have in their mind that the collaboration should be organized so, that as much value as possible will be created to all participants during collaboration process. The performance measurement is about predicting how value network can be enhanced, while trying to solve the challenges that brought them together. Figure 2 is an overview of performance measurement idea for collaboration, which it was described earlier. The strategic thinking of Value Network Scorecard is behind this picture.

The outcomes of collaboration can be easily observed from the value network map: the solved challenges, as a common benefit to all participants, as well as different value-tributes to every network participant, as individual benefits. In the value network map are predicted the outcomes of collaboration, as the target outcomes. This is done in the beginning of performance measurement process. There is expressed the flue of value between all collaboration participants that will result as outcome of collaboration. The Value Network Scorecard is adjusted from the Balance Scorecard (Kaplan and Norton, 2001) for the network

perspective of organization. While Balance Scorecard is a financial approach in performance measurement, Value Network Scorecard focuses on network efficiency, measuring and predicting the value creation in the network (to network participants, as well as to customers).

Figure 2: Translating the vision and strategy of collaboration from theory to practice



In the Figure 3 there are presented in detail all the components of Value Network Scorecard. Similarly to Balanced Scorecard (Kaplan and Norton 1996), but in a little different manner, Value Network Scorecard offers managers four different perspectives related to: customers, collaboration process, network efficiency and innovation. Therefore the network will operate efficiently if it is able to solve challenges related to customers as well as overcoming challenges related to collaboration process. In order to create new value in the network, innovation and learning is needed when assigning the roles and the responsibilities. The distribution of roles and responsibilities should be done in the best possible way, by identifying first the partner's assets and resources and then analyzing who is the right partner to solve a specific challenge. Some partner would need to put forward little effort in solving a specific challenge if it possesses the right resources/assets. This way new value can be created to other partners if a big encountered challenge was solved with minimum efforts by others. Value network can be enhanced continuously, when new challenges appear, if the distribution of roles is done in the best possible way. The assets of the partners can be converted into value to others, that way. In the performance measurement process of Value Network Scorecard, mapping the value network is a very important part, that needs skills and *specific steps* that should be followed. We recommend the following steps:

- (1) Identifying challenges in the activity of the network;
- (2) Identifying participants' assets and resources (intangible and tangible assets);
- (3) Establishing roles for participants, according to their assets, in order to solve the challenges;
- (4) Converting the assets into value in order to enhance the value network (codifying the data).
- (5) Adding the value-attributes into value network map

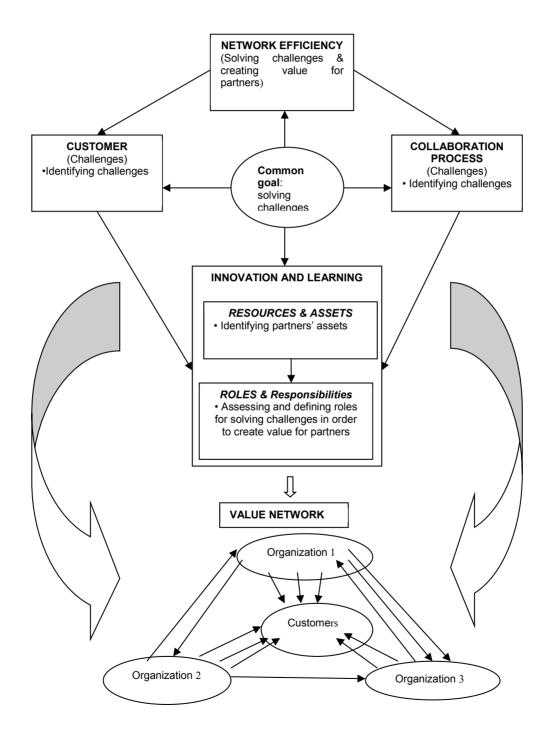
In the following we'll exemplify, step by step, how Value Network Scorecard can be used in practice. First we will describe the data and methodology we use and after that a concrete example, using a case study, will be used in this regard.

# **DATA AND METHODOLOGY**

The implementation of Value Network Scorecard was realized through a case study: the collaboration between public, private and third sector in providing welfare services for elderly in Finland. The public sector has the responsibility to provide welfare services for elderly in Finland. The finish government strategy is to provide welfare services to elderly people, so that they can live as long as possible in their

own homes, because enhanced services in specialized rest homes are much more costly (Bakker et al 2003). Welfare services are provided through public procurements from private and third sectors' organizations or they are provided by the public sector itself, depending on its own resources in specific areas. Due to the limitation of resources and the big amount of challenges that exists in elderly care domain, an effective collaboration that must be strategically managed, is required. Performance measurement is a very important part of strategic management in that respect.





Performance measurement with Value Network Scorecard starts with the mapping of value network. The first step in value network mapping is to *identify the challenges* in the activity of network. A workshop with experts from all three sectors was carried out, aiming to identify the challenges. Furthermore, during the same workshop session were *identified the strength* and resources of every sector (intangible and tangible assets); the second step of value network mapping was fulfilled the same time. Three persons from every sector participated in the workshop session. The participants were selected from managerial staff of every sector, which has wide experience in the delivery of welfare services for elderly. From the public sector were selected top managers and from the private and third sectors were selected manager directors. All of them were involved in collaborative projects for elderly services delivery and the challenges from that domain were well known by all of them.

In order to identify the challenges and every sector's assets, Think Tank software was chosen as a working tool during the workshop session. Think Tank software supports the coordination of strategic planners, offering group intelligence and real-time decision support. It allows a quick brainstorming anonymously, encouraging everyone to participate actively to expose their opinions. In the beginning of the workshop session we had a short list with challenges collected from the source documents related to welfare services in Finland and participants were asked to complete the list with other challenges which they encountered in their collaborative activity. Similarly, a ready short list with every sector's assets was given to them to be completed during the workshop session. In the end of workshop session we got a long list with different types of challenges from the collaborative activity in elderly services delivery. The challenges were divided into (a) customer related challenges and (b) challenges related to the collaboration process, as they are identifies in different groups in the Value Network Scorecard (Fig.3). Even so, in order to map the value network, we needed to divide the challenges in smaller specific groups to be easier to fit them in smaller maps. After the second step, of identifying the sector's assets (strengths) and resources, as a result of this task we got a table with three columns, where are specified the strengths and resources, by sector. Going further to the next steps that must be followed for value network mapping, establishing roles in the network and converting the assets into value-attributes have to be done. For these steps another workshop session is required. To be able to demonstrate the applicability of Value Network in practice through this publication, the tasks from these steps were conducted by the research team involved in this project (three researchers). When the tasks were performed, the results were validated (with small modifications) by an expert in the domain of elderly services delivery (a top manager from the public sector) who participated earlier in the workshop session.

In order to perform these tasks for value network mapping purpose, every single challenge should be analyzed carefully. First pondering what kind of abilities are needed to solve specific challenge, then identifying which network participant has the main abilities (assets), or resources, to solve that specific challenge efficiently. Efficiency in this case means to create value for other network participants. Then the assets are converted into value, by analyzing how a specific asset of a participant can be converted into value to other network participant. Finally all the *value-attributes are added in the value network map*, one by one. Trying to find solutions to solve all the challenges in an efficiently way, new value will be created for all network participants, enhancing the value network that way. The value network map obtained through the Value Network Scorecard tool is then used in performance measurement of collaboration, where can be easily observed the goals that are set for the collaboration process. From the value network map can be easily observed also what is the predicted performance for the collaborative network, what new value can be created for all participants if all the challenges will be solved as it was planned. In the following section we show how to use the Value Network Scorecard in practice.

# **RESULTS: USING VALUE NETWORK SCORECARD IN PRACTICE**

In this section we exemplify how we implement performance measurement in collaboration using Value Network Scorecard. To understand better, we'll exemplify step by step how Value Network Scorecard can be used in practice, following the five steps described in the section Value Network Scorecard. (1) *Identifying challenges in the activity of the network* As we explained earlier, the first step in predicting and measuring performance using this tool is to identify the challenges from the activity of the network:

(a) customer related challenges and (b) challenges related to the collaboration process. As we already mentioned, the list of identified challenges was very long and we divided them into small groups. *Customer related challenges* were divided in three groups:

(1) the availability of services, (2) the quality of services and (3) the prices of services and the financial support for the clients. The challenges related to the collaboration process were divided into two groups: (1) the management of service system and (2) the integration of service system. The list of the challenges related to the management of service system was the longest one. For the scope of this paper we take for the exemplification only one group of customer related challenges, those related to the quality of services. The list of challenges belonging to this group is much shorter than the others and it is easier to understand the exemplification trough a simpler example. Following is the list of the challenges related to the quality of services (customer-related challenges).

•*Personalization of services,* to meet the customer needs is required. The needs of people are usually very different from a person to another, according to their health situation, or the own habits. For example in the current service system the most catering services are provided by the public sector. In order to organize the time schedule efficiently, the breakfast is provided to everyone during the same time period, daily between 8 and 9 a.m. This schedule it is not suitable to all people, because their daily rhythm is quite different from a person to another. Some of them awake up early in the morning, at 5 a clock; some others may awake up at 10 a clock. The catering services should be personalized, according to everyone's needs.

•More time spend with the customers is needed. Due to the limitation of personnel resources, the public sector's personnel seem to be always in a hurry. They perform quickly their task and usually they don't have time to discuss with the customers. If the time it wouldn't be so limited, the personnel could give more attention the elderly, discussing about their needs, which would be very valuable information for service enhancement. But the most important is that the customers would be much more satisfied and their quality of life could be enhanced significantly that way, because most of them are lonely people. •More activities for the elderly are required: In elderly home care usually the basic daily needs are covered, but there are not so many other activities organized for them during the whole day. Furthermore during the evenings and weekends much less activities are organized for elderly people. In some communities the third sector's organizations (e.g., the church or non-profit organizations) arrange different kind of activities for elderly, but they are not enough and in some municipalities (or places) they are inexistent.

•Service quality comparison: provided by different suppliers is difficult to be made by the old people, because there are no specific criteria in that direction. They do not know what exactly a service should include. The services quality is very irregular, depending on the service supplier. Service standard regulations are needed in that sense.

•Self-determination of clients: for service delivery it is not always meat. Even if this principle should be complied when providing services to elderly people. In some situations if the elderly doesn't have any

(1) *Identifying participants' assets and resources (intangible and tangible assets)* The strengths and the resources of the network participants were identified during the workshop session, where nine persons participated, representatives of every sector. The results are included in the Table1, bellow.

Public sector's assets	Private sector's assets	Third sector's assets
Certainty of activity	Innovativeness	Timetable flexibility
Certainty of service delivery	Customer-oriented services	Regional know-how
Nearness of services to customers	Collaborative capacity	Human resources
Democratic service supply	Advanced welfare services	Customer-oriented services
Responsibility to organize services	High educational level and technology	Church is expert in spiritual needs and
(quality control)	know-how	crisis situations
Financing/funding opportunities	Flexibility of open times	Light organization structure
Taxing power	Effectiveness of action	Free labor (volunteers)
Continuity of activity	Financing know-how	Special know-how
Legitimacy know-how, law regulation, law making	Transparency of earnings and expenses	Big collective facilities (of non- governmental organizations)
Wide collaboration network	Individuality/quality of services	Big collective spaces
Opportunity to govern the cost of the	Well defined core tasks	The pioneer role in many concepts
process		development
The ethic of public services	-	Ideology is value based
Variety of know-how	-	-

Table 1: The strengths and resources, by sector

(1) Establishing roles for participants, according to their assets, in order to solve the challenges At this step every challenge should be taken separately for analyses. Representatives of every participant organization ponder together, during a workshop session, how the challenges could be solve in the most efficient way. Should be also analyzed which network participant has the best capabilities or resources to solve the specific challenge with minimum effort, creating that way value to other network participants, as well as to customers. The network participants' roles and responsibilities are defined during this session. For the purpose of this paper, this task was performed by the research team. Following, every challenge is analyzed individually and the results are explained.

• Personalization of services In order to find solutions to solve a challenge, first must be identified the participant who has the more suitable resources or capabilities to solve it. Looking in the table where are listed the assets of every participant, it was decided that private and third sectors have the best capabilities to solve this challenge. Private sector has the assets of providing advanced welfare services to elderly and it is effective in its activity. Third sector's asset is that it provides customer oriented services to elderly, according to their needs. Another important asset of third sector is its special know-how. The elderly people are usually very confident to the personnel of third sector organizations (church, voluntary or nonprofit organizations). That's why third sector knows much better than the other sectors the needs of elderly people. By an effective collaboration together with private and third sectors, public sector could organize and provide personalized services to elderly, according to their special needs. The private and third sectors could offer consultancy to the public sector, which is responsible for services providing to elderly. Furthermore in many situations, depending on the area every sector operates and the customer needs, personalized services could be provided by third or private sectors. According to these analyses and decisions made by the participants of the analysis session (in our case the research team), the *roles* of providing personalized services are attributed to the private and third sectors, depending on the areas where they operate. Additionally, the private and third sectors play the role of consultants for the public sector. By doing so, new value is created to customers by private and third sectors, offering them personalized services. The same way private and third sectors create new value to the public sector, offering consultancy to it, but they can offer consultancy to one another, because every organization owns

different kind of knowledge that may be valuable knowledge for everyone. Alternatively private and third sectors could fulfill the public sector's needs by helping it to provide customer oriented services and also advanced welfare services.

More time spend with the customers is needed: Due to the limitation of this paper we'll explain shortly about the analysis of the next challenges. When looking into the table with sectors' strength and resources, analyzing this data, it was decide that the private and third sectors have capabilities and resources to solve this challenge. With private sector's assets "Quality of services" and "Flexibility of open times", and alternatively the third sector's assets "Ideology/empathy value-based", "Flexibility of timetables" and "Human resources" this challenge could be solved. So the private and third sectors have the roles of providing high quality services to the special segment of elderly people who requires more attention and also to provide them homogeneity of service delivery during the whole day. Especially the third sector human resources (voluntary workers) may be a huge help in this case, because there are no needs for qualified personnel to be able to discuss with elderly people.

*More activities for the elderly are required:* Similarly to the earlier explanations, the role of solving this challenge could be attributed to the third sector, based on their assets "Human resources" and "Ideology/empathy value-based". Recreational services could be provided by the third sector through the voluntary workers if the collaboration is well managed and organized.

*Service quality comparison:* Public sector has the capability of solving this challenge through its asset of "Law regulation". Service quality standards could be created by the public sector through law regulations. These would help either private and third sectors in comparing the service quality when competing for services and also could help customers by being knowledgeable about what kind of tasks or activities the services should include.

*Self-determination of clients:* Looking and analyzing the data from the table with sectors' assets, it was decided that the role to solve this challenge to be attributed to the third sector. By putting third sector's assets into action ("Regional know-how", "Ideology/empathy value-base" and "Human resources") elderly people who have no relatives, could be helped by third sector's personnel (e.g., voluntary workers, church) to determine the need and the planning of services.

(1) Converting the assets into value in order to enhance the value network (codifying the data). After all the challenges were analyzed and the attribution of roles was defined, the data got at the previous step should be codified, in order to be able to introduce all the information into value network map. The codified data is in the Table 2, bellow. The table is organized into three columns and every challenge's analysis is on the same raw. The most important data is in the third column ("Converting asset into value"). There can be seen what new value-attributes can be created in the network while trying to solve specific challenge. With the bold characters are labeled the value-attributes and under it is specified who offers the value and to whom is offered. For example the first value-attribute in the table ("Advanced welfare services") is created (offered) by private sector to the public sector (Private->Public).

(5)Adding the value-attributes into value network map: This is the final step in value network mapping. The map will be drawn based on the data from the third column of Table 2. All the participants in the network are identified from the table and they will be putted on the map using the ovals (in our case public, private and third sector, plus the customers). After that all the value-attributes are introduced on the map, one by one, using the arrows. With dashed lines are represented intangible value-attributes and with continue lines are represented tangible value-attributes. From the table can be observed who offers the value to whose (indicating what the direction of the arrow on the map is). With rectangles are labeled the value-attributes. Because we have a lot of information in the table 2, it would be difficult to fit all the information on the same map. To get a clear map, we decided to put all the information on two different

pictures: on the first map (Figure 4) to illustrate only the value network between network participants and on the second map (Figure 5) to illustrate the new value created to the customers through collaboration. We used Microsoft Word to draw the maps. With a better drawing tool could be obtained a single picture of the entire value network, which would be a more illustrative picture.

Challenge	Asset to respond to challenge	
	(Whose sector asset) Roles assessment	
Personalization of services	Advanced welfare services	Advanced welfare services Private->Public
	(Private) Effective activity (Private)	Private->Public
	Customer oriented services	Customer oriented services
	(Private, Third)	Private->Public
	(Trivate, Third)	Third->Public
	Special know-how (Third)	Service organization
		consultancy Third->Public
		Third->Private
		Private->Public
		Private->Third
		Personalized services
		Private->Customers
		Third->Customers
Too short time spend with the clients	Quality of services (Private)	Service quality Private->Public
	Ideology /empathy value-based	Third->Public
	(Third)	High quality services Private->Customers
	Flexibility of open times (Private)	Third->Customers
	Flexibility of timetable (Third)	Homogeneity of service delivery during the
	Human resources (Third)	hole day
	(Timu)	Private->Public
		Third->Public
		Wide range of services
		Private->Customers
		Third->Customers
More activities for the elderly are required	Ideology /empathy value-based	Recreational services
	(Third)	Third->Public
	Human resources (Third)	Recreational services
	Lauren (Darbier)	Third->Customers
Difficulty in comparing service quality	Law regulation (Public)	Service quality standards Public->Private
		Public->Third
		Public->Customers
Self-determination of clients for service	Regional know-how (Third)	<b>Consultancy</b> in individualized service
delivery is not meat	Ideological/empathy value-based	planning Third->Public
	(Third)	Third->Private
	Human resources (Third)	Self-determination of service planning
		Third->Customers

Table 2: Converting assets into value to solve challenges related to the *quality of services* 

Figure 4: Value network map (*part 1*): flow of value between network participants resulted while trying to solve challenges related to the quality of services through collaboration

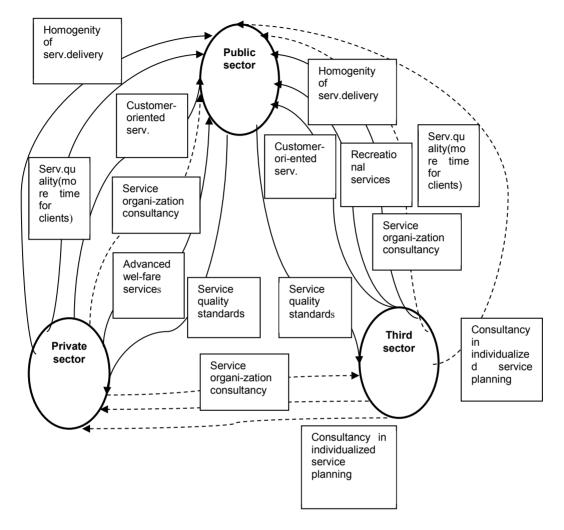
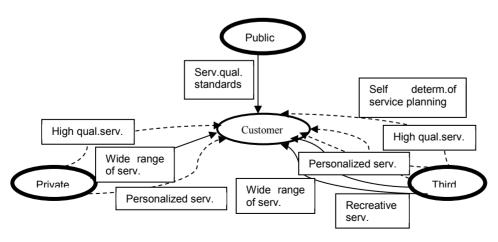


Figure 5: Value Network map (*part 2*): new value created for customers while trying to solve challenges related to the quality of services through collaboration



#### DISCUSSION AND CONCLUSIONS

In this paper it was illustrated how to use Value Network Scorecard in practice, through a case study example. Value Network Scorecard is a tool for performance measurement and performance prediction that can be used in collaborative networks. Following the logic of Balanced Scorecard, Value Network Scorecard jumps to a higher level of organization, the network level. Instead of traditional way in performance measuring, when the aim is measure and improve the financial results, Value Network Scorecard aims to create new value for all network participants, while trying to solve the challenge in the collaboration process. The main task in performance measurement and performance prediction, using this tool, is to map the value network. From the value network map can be easily seen what new value can be created during collaboration process, or more exactly what is the value network potential.

If the collaboration process is well managed, the value network potential is huge, as can be seen from the value network map (Figure 4 and 5). Based on value network analysis, the roles in the network can be easily assigned. In our example, looking and analyzing the map, can be observed that private and third sectors may have important roles in enhancing the quality of services in elderly care if the collaboration process is well managed. They are able to create new value to customers, by providing them with high quality services that could fulfill the gaps in the current service system.

Furthermore private and third sectors can create new value for the public sector, providing consultancy to it, regarding the enhancement of quality of services. Additionally, indirectly the same value that private and third sectors create to customer they create it to the public sector as well, because public sector is responsible for services providing. Without the collaboration between all three sectors, the enhancement of service quality would be not possible, due to the limitation of resources. Using Value Network Scorecard for performance measurement of collaboration every network participant can get great benefits from collaborative activities, in a way or another. New value can be created to all participants only if the collaboration process is well managed. Value Network Scorecard is a tool that helps managers in performing this task. In performance measurement and performance prediction with Value Network Scorecard, value network mapping is just a first big step. In order to follow if the goals are fulfilled in the future, as it was predicted with Value Network Scorecard, new actions should be planed. There have to be specified exactly how every single goal should be meat. What actions are required in order to create the value predicted in the Value Network Scorecard. This is a topic for the future research in that scope.

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# PATENTS AND TAXES DON'T MIX

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#### ABSTRACT

An unusual (and misguided) interpretation of a 1998 Federal Court of Appeals case led to the US Patent Office issuing hundreds of patents relating to tax matters. Numerous logical and policy arguments can be made that this is a gross misapplication of the Patent Law whose effects are 100% negative. The Supreme Court reviewed a related matter in 2010 but did its decision did not change the Patent Office's position on the issue. It continued to issue patents for tax strategies. Fortunately, the matter was resolved legislatively very recently by the America Invests Act. This piece examines the history of this issue and several other matters. It describes why the nature of tax law, including the confidentiality of tax returns, makes it impossible for patent examiners to perform their investigations properly. It also explains why issuing such patents was harmful to not only taxpayers but also the legal and accounting communities.

# INTRODUCTION

"Patents should be tolerated only if they serve the public good." (Kieff, et.al. 2008) The United States Constitution specifically authorizes patents. Among the powers granted to Congress is "...To promote the progress of Science (sic) and useful arts, by securing for limited times to Authors (sic) and Inventors (sic), the exclusive right to their respective Writing (sic) and Discoveries (sic)." (Constitution for the United States of America, 1787). Thus, the rationale for issuing patents is to encourage innovation. However, in the case of tax strategy patents, the result would be precisely the opposite.

#### Legal Issues

"Whoever invents or discovers any new or useful process, machine, manufacture or composition of matter, or any new or useful improvement thereof, may obtain a patent thereof, subject to the conditions and requirements of this title." 35 USC 101. The next two statutes, 35 USC 102 and 103, set out some rules on what may or may not be patentable. In addition, due to the common law nature of the United States legal system, a number of courts have further limited the scope of patentability. The case which opened the Pandora's box of permitting tax strategy patents was State Street Bank and Trust Co. v. Signature Financial Group, Inc., 927 F.Supp 502, 308 U.S.P.Q.2d 1530 (D. Mass 1996), rev'd, 149 F.3d 1368,47 U.S.P.Q.2d 1596 (Fed. Cir. 1998). This decision will hereinafter referred to as State Street II Signature held U.S. Patent No. 5,193,056 for "Data Processing System for Hub and Spoke Financial Services Configuration". State Street attempted, but failed, to negotiate a license to use the patented system. Then State Street filed an action for declaratory judgment asserting several issues including invalidity of the patent. The trial court granted summary judgment on patent invalidity, citing the court created "business methods" exception and the "mathematical algorithm doctrine" exception.

In State Street II, the court takes special note of the word "any" in 35 USC 101, interpreting it as proof that the Congress did not intend for any restrictions to be placed on patentability, aside from those enumerated in the statutes. The court goes on to deal with the two exceptions to patentability, which were relied upon by the District Court in granting summary judgment on the invalidity of the patent. It first cites Diamond v. Diehr, 450 US 175 at 185 (1981), in which the US Supreme Court specified three categories, which are ineligible for patents: "laws of nature, natural phenomena, and abstract ideas". It is the last of these on which the "mathematical algorithm" exception is based. The Court stated that mathematical algorithms are not patentable if they are merely abstract ideas.

A subsequent Court of Appeals decision held that if the algorithms were applied practically, leading to "a useful, concrete and tangible result" that they were no longer merely abstract ideas and the mathematical algorithm exception would not apply. <u>In re Alappat</u>, 33 F.3d 1526 at 1544, 31 U.S.P.Q.2d at 1557 (Fed. Cir. 1994). Along with further analysis, this is the basis on which <u>State Street II</u> reverses the trial court's holding that the mathematical algorithm exception invalidates the patent.

The "business method" exception, based upon the conclusion that allowing patents for such matters would facilitate monopolies, had become firmly established in the first half of the twentieth century. <u>Hotel Security Checking Co. v. Lorraine Co.</u>, 160 F.2d 467 (2d Cir.1908), <u>Loew's Drive In Theatres v.</u> <u>Park-In Theatres</u>, 174 F.2d 547 (1st Cir. 1949). <u>State Street II</u> took very sharp aim at the business method exception, stating, "We take this opportunity to lay this ill-conceived exception to rest. Since the 1952 Patent Act, business methods have been, and should have been, subject to the same legal requirements for patentability as applied to any other process or method." Following <u>State Street II</u>, patent applications for all sorts of business methods, including tax strategies, began flooding the Patent and Trademark Office. For a number of years, the American Institute of Public Accountants and a number of other tax related organizations issued countless statements, letters, and articles explaining why tax strategy patents are ill conceived and urging ending the practice of issuing such patents. (American Institute of Certified Public Accountants 2012)

On February 17, 2007, Senators Obama, Levin and Coleman introduced the Stop Tax Haven Abuse Act, which included language prohibiting patent protection for anything "designed to minimize, avoid, defer, or otherwise affect the liability for Federal, State., local, or foreign tax". (Senate Bill 681 2007)In 2010, the US Supreme Court had an opportunity to revisit this issue in Bilski v. Kappos, 561 U.S. (2010) but failed to do so.As of September 2011, over 150 tax strategy patents had been issued while applications for more than 160 were pending. (American Institute of Certified Public Accountants 2011)

# Incapacity Of The Patent Office To Properly Evaluate Tax Strategy Patent Applications

Patents may be issued if the subject matter must be novel and non-obvious "to a person having ordinary skills in the art to which said subject matter pertains." 35 USC 102(a) and 103(a). Whether an application meets those standards is determined by patent examiners. However, these examiners are generally engineers, and certainly not tax lawyers or accountants. There are at least two reasons why the examiners are unable to properly assess "prior art" in the area. First, they lack the ability to perform complex tax research. And patent examiners are generally legally prohibited from consulting others outside the Patent and Trademark Office. Second, and more importantly, the confidentiality of tax returns makes it literally impossible to determine whether anyone has used a particular tax strategy. In addition, with all of these limitations, examiners spend between 15 and 20 hours per application. (Aprill 2007) (American Bar Association, 2007).

# Policy Issues

"...tax strategy patents have no value apart from the acts of Congress. These patents, which involve applications of the laws of Congress, are thus fundamentally different from the patents for which our patent system was designed – patents that involve applications [of] technology and the laws of nature." (Aprill 2007) (Schwartz 2007).

One commentator notes that, contrary to the intent of the patent laws, strategies on tax patents would actually discourage improvements in the "art". She wrote

"Historically, the dissemination of tax planning ideas has been open and widespread. Tax practitioners currently share information and ideas with each

other freely. There is an astonishing array and number of meetings, conferences, conventions and listservs where tax planning ideas are shared. Although the patent system is designed to encourage the dissemination and discussion of ideas and information, many tax practitioners are concerned that the spread of tax strategy patents will have the opposite effect, namely, that those with new ideas or the beginnings of ideas will hesitate to enter into discussions with others. If patents become an important part of the tax landscape, the atmosphere could become more secretive and less cooperative. The tax system as a whole will suffer if, in order to protect their patentable intellectual property, tax professionals are no longer willing to disclose, evaluate and criticize each other's insights regarding how to comply with the tax system. (Aprill 2007)

Another commentator addresses a more fundamental issue: whether tax planning is something that should be encouraged. He points out that tax planning is "deadweight to society" because it results in a number of undesirable effects: distortions in taxpayer behavior, out of pocket costs in terms of attorney fees and the expense of the transaction, and possible government costs of enforcement. (Hellwig 2007) Hellwig also enumerates two reasons why tax planning should be discouraged. He first offers a scenario in which a taxpayer may, by completing a simple task, reduce her/his tax liability by 10%. Since the commission of the task is relatively simple, all taxpayers avail themselves of the opportunity. Ultimately, the government would respond by raising tax rates to maintain the same level of revenue. Thus, the tax strategy is rendered useless. (Hellwig 2007)

Next, Hellwig considers a situation which is more representative of reality, in which only some taxpayers exercise the tax saving option. One group of taxpayers will receive a financial benefit. Then a greater burden is placed on those taxpayers who did not make this choice. He suggests that the perception of unfairness by the latter group may lead them to reduced compliance. (Hellwig 2007) Others have reached similar conclusions. "Patented loopholes will make the tax system more complex. Greater complexity means greater frustration for taxpayers. Taxpayers will consider the U.S. tax system more unfair and arbitrary. This is dangerous because the U.S. tax system relies on voluntary compliance. (Drennan 2007)

# The End Of An Era

In 2011, S. 23, also known as the America Invents Act, made its way through the legislative process. It contained explicit language prohibiting the issue of patents on tax strategies. The original version passed the Senate on March 8, 2011. The House passed its own version on June 23, which was adopted by the Senate on September 8. President Barack Obama signed the bill into law on September 16, 2011.

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# A COMPREHENSIVE CASE STUDY: US GAAP CONVERSION TO IFRS

Peter Harris, New York Institute of Technology William Stahlin, New York Institute of Technology Liz Washington Arnold, New York Institute of Technology Katherine Kinkela, New York Institute of Technology

# ABSTRACT

International Reporting Standards (IFRS) has become the required framework for most of the world financial markets effective on January 1, 2011. The United States is in a transformation stage, and it is expected that IFRS will be in place by as early as 2014. As such, it is important to introduce IFRS accounting rules in the college curriculum and make it a major component of accounting classes. At present, the CPA Uniform CPA exam is testing IFRS and its testing content is increasing with each current test. Additionally, the CFA exam tests IFRS exclusively and has eliminated US GAAP from its curriculum, basing its action on the fact that the CFA examination is a global based exam. This case study takes a US GAAP prepared Income Statement and balance Sheet, and based on the facts of the case, requires students to prepare an IFRS Based Statement. This case study is most suitable for a second offered Intermediary Accounting and a Financial Statement Analysis class, as well as an Accounting Theory and Accounting Capstone class and it recommended for graduate level of study. A solid understanding of both; US GAAP and IFRS rules is required to adequately address this comprehensive case study.

**KEYWORDS**: US GAAP, IFRS, LIFO, Fair Market Value Accounting, Asset Impairment, Asset Revaluation.

#### Company Background

JAL Corp, a publically traded NASDAQ company (symbol JAL), is a manufacturer of prescription drugs. Its main headquarters is based in Miami, Florida and the company has been operating since 1981. The company sells its products to the retail market on a worldwide basis. Its major clientele is Wal-Mart. Its stock sells at 45 US Dollars per share, and its 52 week price range is between 37.75 and 67.85 US Dollars, with a market cap of 10.2 billion dollars.

Their financial statements presented below for the Year Ending December 31, 2011 have been prepared using US GAAP. JAL's controller, Mercedes, would like to begin to see the effects of using IFRS on the Income Statement and balance Sheet and has been assigned this task. The company would like to adapt IFRS by as early as next year as it is considering a new stock issue in the Costa Rica, which requires IFRS compliance.

Financial Statements (U	S GAAP Prepared)		
Balance Sheet (in 000's)	)		
As of 12/31/2011			
ASSETS		LIABILITIES AND SHARE	EHOLDERS'
EQUITY		Cu	urrent Assets
Current			Liabilities
Cash	43,000	Accounts payable	30,000
Accounts Receivable	35,000	Accrued Expenses	25,000
Investments(AFS)	20,000	Taxes payable	15,000
Inventory (LIFO)	60,000	Total Current Liabilities	70,000
Total Current Assets	158,000		
Property, Plant and Eq	uipment	Noncurren	nt Liabilities
Assets (cost)	110,000	Bonds payable 5%, Convertible	60,000
Less:		Total Liabilities	130,000
Accumulated Depreciat	ion (40,000)		
	70,000	Shareholders' Equity	
Intangible Assets		Common Stock (\$1 par)	60,000
Trade name	4,000	Surplus (Deficit)	3,000
Patent	6,000		
Less: 4,000 Accumulate	d Amortization)	Retained Earnings	50,000
Goodwill	5,000		
	15,000	113	,000
Total Assets	243,000	Total Liabilities and Shareholders' Equity	243,000

# Income Statement (US GAAP Prepared) 1/1/2011-12/31/2011

(In 000's)	
Sales	350,000
Cost of Goods Sold	275,000
Gross profit	75,000
Selling and Administrative Expenses	35,800
(exclusive of Amortization and Depreciation)	
Earnings before Interest, Taxes, Depreciation and Amortization	39,200
Amortization and Depreciation Expense	13,000
Earnings before Interest and Taxes	26,200
Interest Expense	3,000
Income before tax	23,200
Tax Expense (25%)	5,800
Earnings from continuing operations and before	
Extraordinary Item	17,400
EXTRAORDINARY ITEM	
Net loss from Earthquake (net of 1,000 taxes)	(3,000)
Net Income	14,400

# **ADDITIONAL INFORMATION**

- 1- AXE Corp. uses the LIFO method to account for its inventory. The LIFO reserve was \$5,000 at the beginning of the year and \$7,000 as of year-end.
- 2- Management has established that the Fair market value of Property, Plant and Equipment as of 1/1/2011 is \$86,000, resulting in a \$5,000 increase above Book Value.
- 3- Upon review , management has established the following Fair Market Values for the presented assets as of 12/31/2011:

Goodwill	7,000
Trade name	6,000

- 4- In 2010, there was a Goodwill impairment accounted for in the amount of \$2,000, thereby reducing the carrying value from \$7,000 to \$5,000.
- 5- In 2008, there was a Trade name impairment of \$1,000.
- 6- Property, plant and equipment are depreciated over a 10 year period using the straight line depreciated method. There is no salvage value. Amortizable Intangible assets are amortized over a 5 year period, using the straight line method. The half year convention is applied for all assets placed in service during the year. No salvage value is expected.
- 7- Investments include Available for Sale Securities (AFS) with a Fair market Value of \$20,000 as of 12/31/2011. The beginning of year value was \$15,000. \$ 3,000 of this gain was due to exchange rate currency gains.
- 8- There are long term contingencies of \$3,000 stemming from civil lawsuits. Legal council considers the payout slightly "more likely than not", but not highly probable. Also legal counsel considers in an independent case where the company is a plaintiff, the recovery of \$10,000 in a punitive damage case. Both cases are expected to settle in a time frame of greater than one year.
- 9- The extraordinary loss was due to an earthquake damage which is considered unusual and infrequent.
- 10- The Bonds payable are convertible and have a maturity date of December 31, 2020. There is an assigned value of 10 percent associated with the conversion feature as calculated by independent consultants using the Black-Sholes model of valuation.
- 11- In 2011, the company spent \$2,000 on internally feasible Development Costs, which relates to their pipeline of pharmaceutical drugs.
- 12- The effective tax rate for JAL is 25 percent.

# REQUIRED

For each scenario above (1 to 12):

- 1- Identify the similarities and differences between the Income Statement effects of US GAAP and IFRS.
- 2- Record the differences above in journal entry form to conform to IFRS rules.
- 3- Prepare an IFRS Income Statement for the 2011 calendar year, and,
- 4- Prepare an IFRS Balance Sheet for the 2011 calendar year.

# SOLUTIONS

# Parts 1 and 2 Solutions:

1- LIFO is not permitted under IFRS. As such, FIFO has to be used. The difference between the LIFO and FIFO Cost of Goods Sold is the difference between the beginning of the year and year-end differential in the LIFO Reserve. In this case, the difference will result in a decrease in Cost of Goods sold by virtue of a greater Inventory total under FIFO in the amount of \$2,000 (\$7,000 less \$5,000) (1A). Additionally, there will be another increase in FIFO inventory to reflect the extra reserve of \$5,000 (1B), bringing a total increase in inventory of \$7,000. There will be a Deferred Tax addition created, which will equal the \$5,000 times the tax rate of 25 percent. As such , the journal entries will be :

1A-Dr. Inventory 2,000

Cr. Cost of Goods Sold 2,000 1B- Dr. Inventory 5,000 Cr. Deferred Income Tax 1,250 Cr. Retained Earnings 3,750

2- IFRS allows for Asset Revaluation for Property, Plant and Equipment and Intangible Assets. Both US GAAP and IFRS allow for asset impairment, which is tested on an annual basis. IFRS allows for an asset reversal of impaired assets for all tangible and intangible long term assets; excluding Goodwill. US GAAP allows for impairment, but once lowered, no reversal of impairment is allowed. In no circumstance may Property, Plant and Equipment assets or Intangible assets be written above its book value under US GAAP.

Resulting Accounting Treatment: US GAAP

The impairment loss for tangible and Intangible Assets is recorded on the income Statement and results in a lower carrying value on the Balance Sheet.

Resulting Accounting Treatment: IFRS

The loss is treated similar to US GAAP.

Write-up of tangible and intangible assets is recorded as comprehensive income and not on the Income Statement. Finally, reversal of losses, up to the amount of the impairment, is recorded as a reduction in loss-a gain- in the Income Statement, and any excess is recorded as part of comprehensive income. Goodwill may not be reversed, under both US GAAP and IFRS once impairment has occurred. So the accounting for Goodwill is consistent between both accounting bodies.

On 1/1/2011, the Property, Plant and Equipment assets were increased by \$5,000 above Book Value. For IFRS purposes, this results in an increase of depreciation expense of \$500 (\$5,000 divided by a 10 year useful life using the straight line depreciation method). The Adjusting entry then is:

2A	Dr. Depreciation Expense	500
	Cr. Accumulated Depreciation	500
2B-	Dr. Property, Plant and Equipment	5,000
	Cr. Shareholders' Equity – Surplus (D	eficit)(Comprehensive Income) 5,000

The trademark had an estimated fair market value of \$7,000 as of year-end. US GAAP does not allow for reversals of previous recorded impairments. Under IFRS, the previous impairment loss incurred in 2008 of \$1,000 will be reversed to the Income Statement, as a reduction to loss-in effect, a gain, and any excess over that in recorded as Comprehensive Income (not on the Income Statement: but on the Balance Sheet – Shareholders' Equity-Surplus (Deficit) account). The adjusting entry is:

3- Dr. Trade name 2,000	
Cr. Reversal of Impairment Loss- Trademark – Income Statement	1,000
Cr. Shareholders' Equity –Surplus (Deficit) (Comprehensive Income)	1,000

- 3- Finally, there is no adjustment for Goodwill as both US GAAP and IFRS have similar treatment for this Intangible Asset. Also note that Trademarks and Goodwill are not amortizable Intangible Assets due to their indefinite useful life.
- 4- Available For Sale Securities (AFS)

Both US GAAP and IFRS treat AFS securities similar in that they are reported at Fair Market Value at the Balance Sheet date. Any income or loss is part of comprehensive income (not Income Statement). The

only difference however is that IFRS treats the foreign currency exchange gain or loss as an income (loss) item, which is reported in the Income Statement.

As such, \$3,000 of the increase in the AFS value, which relates to currency gain, is part of non-operating income. As such, the adjusting entry is:

- 4- Dr. Shareholders' Equity- Surplus (Deficit) (Comprehensive Income)3,000Cr. Currency Exchange Rate Gain3,000
- 5- US GAAP and IFRS record a contingency loss when the loss is deemed to be probable. This definition of probable differs between the two groups. US GAAP defines probable as "likely", whereas IFRS defines probable as "more likely than not". The result is that IFRS is more conservative in recognizing contingency losses. In this situation, the loss is recorded for IFRS only.
- 6- Neither US GAAP nor IFRS realize contingency gains until the date of occurrence. As such, no contingency gain is realized here .The adjusting entry then is:

	5-Dr. Contingency loss	3,000
	Cr. Contingency Liability payable	3,000
7-	Extraordinary Items- US GAAP v. IFRS	

IRFS disallows extraordinary gains (losses), and as such is not existent. Consequently, this item needs to be part of the non-operating income (loss) schedule of the Income Statement. The gross amount of the loss in this case, is the net of tax loss of \$3,000, divides by .75 (1 less 25 percent tax rate), resulting in a loss from hurricane –before taxes of 4,000.

We reclassify this loss from Extraordinary to non-operating income (loss).

8- IFRS requires that option related securities reflect an equities' portion amount, which equals its underlying value. In this case, 10 percent of the convertible feature has been assigned an options price, and as a result is classified as Shareholder's equity under IFRS. As such, \$6,000 of the \$60,000 convertible Bonds is re-classified as Equity, while the \$54,000 remains as Long –Term Debt. In addition, 10 percent of the interest has to be reclassified as a Dividend payment to reflect the above adjustment. The two adjusting entries as such , are:

Value of Derivatives in Stock/Equity Securities	
6- Dr. Bonds Payable	6,000
Cr. Common Stock or Paid In Capital	6,000

Reclassifying Debt interest payments as Equity. Interest Payments =5%X 60,000=3,000. Total Interest Payment of \$3,000 @10% reclassification to Dividend payment = \$300 7-Dr. Retained Earnings- Dividends Paid 300 Cr. Interest Expense 300

9- IFRS allows for the capitalization of internally Development Costs; if deemed economically feasible and traceable. US GAAP expenses all Development costs.

As such, two adjusting entries are required; the first is to capitalize Development Costs as an Intangible Asset on the Balance Sheet and the second, to amortize this asset over a 5 year period using a half year convention, straight line method. This will equal \$20,000 divided by 5 years, which equals \$4,000 and then dividing by 2 to reflect the half year convention, equaling \$2,000. The Adjusting Entries are:

#### 8A: Dr. Development Costs 2,000 Cr. Development Expense-Part of Operating Expense

8B: Dr. Amortization Expense	200
Cr. Accumulated Amortization	200

#### AXE Corp. Income Statement (in 000's) US GAAP to IFRS Reconciliation 1/1/2011-12/31/2011

INCOME FROM CONTINUING OPERATIONS	US GAAP	ADJUSTMENTS
IFRS		
Sales	350,000	350,000
Cost of Goods Sold	275,000 (1A)(2	,000) <b>273,000</b>
Gross profit	75,000	77,000
Selling and Administrative Expenses	<u>35,800 (8A)(2,0</u>	<u>)00) <b>33,800</b></u>
(Exclusive of Amortization and Depreciation)		
Earnings before Interest, taxes, depreciation and Amortization	39,200	43,200
	(2A) 500	
Amortization and Depreciation Expense	13,000 (8B) 20	00 <b>13,700</b>
Earnings before Interest and Taxes	26,200	29,500
Interest Expense	3,000 (7	) (300) <b>2,700</b>
Income before Non-Operating Income and Taxes	23,200	26,800
Non-Operating Income (Loss)	·	-
1- Reversal of trade name Impairment loss	(3) 1,0	00 <b>1,000</b>
2- Exchange rate gain on AFS	(4)	3,000 <b>3,000</b>
3- Contingent losses	(5) (	<b>3</b> ,000) <b>(3,000)</b>
4- Hurricane loss		( <b>4</b> ,000) ( <b>4</b> ,000)
	(3,000)	
Income before Tax	· · · ·	<u>,                                 </u>
Tax Expense (25%)	5,800	
Earnings from continuing operations	17,400	23,800
Tax Expense (25%)	·	5,950
1 ( )		,
EXTRAORDINARY ITEM		
Net loss from Earthquake (net of 1,000 taxes)	(3,000)	N/A For IFRS
Net Income	14,400	17,850
Less: Dividends Paid		0 (7) (300)
(300)		<u> </u>
Addition to Retained Earnings	14,400	(9)1,575 17,550
ADJUSTING ENTRY (9) Dr. Income Summary		4,600
Cr. Income Tax Payable- Current		1,150
Cr. Retained Earnings 3,450		

To record difference in income between US GAAP and IFRS of 17,850 -14,400, or a net income difference of 3,450. The before tax amount income is 4,600 or 3,450 divided by 1 less the tax rate of 25 percent (.75). The tax expense on this difference is 1,150 (4,600 times 25% tax rate), and also represents a current liability tax payable account. Retained Earnings is increased due to the increased net income total.

IFRS

Note that the \$300 in Dividend payment was recorded as a decrease in Retained Earnings in adjusting entry number 7.

Part 3 Solution: IFRS IFRS Prepared Incom 1/1/2011-12/31/2011 (In 000's)	-	e Statement		
INCOME FROM CON	TINUING OPER	ATIONS		
Sales			350,000	
Cost of Goods Sold			273,000	
Gross profit			77,000	
Selling and Administrat	ive Expenses		47,500	
		ion expense of \$13,700)		
Operating Income			29,500	
Non- Operating Income	(Loss).		_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
· ·	lemark Impairme	nt loss 1,000		
2- Exchange rate g		3,000		
3- Contingent loss		(3,000)		
4- Hurricane loss	•••	(4,000)		
		<u>(.,)</u>	(3,000)	
Earnings before Interest	and Taxes		26,500	
Interest Expense			2,700	
Income before tax			23,800	
Tax Expense (25 %)			5,950	
Net Income			17,850	
			11,000	
Solution 4: Balance Sh	eet-US GAAP -I	FRS Reconciliation		
Solution it building si				
Balance Sheet (in 000'				
Balance Sheet (in 000' As of 12/31/2011				
Balance Sheet (in 000' As of 12/31/2011			USTMENTS	IFRS
As of 12/31/2011	s)		USTMENTS	IFRS
As of 12/31/2011 ASSETS	s)		USTMENTS	
As of 12/31/2011	s) US GAAP		USTMENTS	Assets
As of 12/31/2011 ASSETS Current Cash	s) US GAAP 43,000		USTMENTS	<i>Assets</i> 43,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable	s) US GAAP 43,000 35,000			Assets
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS)	s) US GAAP 43,000 35,000 20,000	ADJ	20,000	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory	s) US GAAP 43,000 35,000 20,000 <u>60,000</u>		20,000 = 7,000	<i>Assets</i> 43,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000	ADJ	20,000	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Education	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment	ADJ (1A) 2,000 +(1B) 5,000	$= \frac{20,000}{7,000}$ 165,000	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Ed Assets (cost)	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment 110,000	ADJ (1A) 2,000 +(1B) 5,000 (2) 5,000	$= \frac{20,000}{7,000}$ $= \frac{7,000}{165,000}$ 115,000	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Education	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment 110,000 tion(40,000)	ADJ (1A) 2,000 +(1B) 5,000		<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Ed Assets (cost) Accumulated Deprecia	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment 110,000	ADJ (1A) 2,000 +(1B) 5,000 (2) 5,000	$= \frac{20,000}{7,000}$ $= \frac{7,000}{165,000}$ 115,000	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Ed Assets (cost) <u>Accumulated Deprecia</u> Intangible Assets	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment 110,000 tion(40,000) 70,000	ADJ (1A) 2,000 +(1B) 5,000 (2) 5,000 (2A) (500)	$ \begin{array}{r} 20,000 \\ = 7,000 \\ 165,000 \\ 115,000 \\ (40,500) \\ 74,500 \\ \end{array} $	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Ed Assets (cost) Accumulated Deprecia Intangible Assets Trade name	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment 110,000 tion(40,000)	ADJ (1A) 2,000 +(1B) 5,000 (2) 5,000 (2A) (500) (3) 2,000	$ \begin{array}{r} 20,000 \\ = 7,000 \\ 165,000 \\ 115,000 \\ (40,500) \\ 74,500 \\ 6,000 \\ \end{array} $	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Ed Assets (cost) Accumulated Deprecia Intangible Assets Trade name Development Costs	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment 110,000 tion(40,000) 70,000 4,000	ADJ (1A) 2,000 +(1B) 5,000 (2) 5,000 (2A) (500) (3) 2,000 (8A) 2,000	$ \begin{array}{r} 20,000 \\ = & 7,000 \\ \hline 165,000 \\ 115,000 \\ (40,500) \\ 74,500 \\ \hline 6,000 \\ 2,000 \\ \end{array} $	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Ed Assets (cost) Accumulated Deprecia Intangible Assets Trade name Development Costs Less: Accumulated Am	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment 110,000 tion(40,000) 70,000 4,000 ortization	ADJ (1A) 2,000 +(1B) 5,000 (2) 5,000 (2A) (500) (3) 2,000	$ \begin{array}{r} 20,000 \\ = & 7,000 \\ \hline 165,000 \\ \hline 115,000 \\ \underline{(40,500)} \\ 74,500 \\ \hline 6,000 \\ 2,000 \\ (200) \\ \end{array} $	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Ed Assets (cost) Accumulated Deprecia Intangible Assets Trade name Development Costs Less: Accumulated Ame Patent	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment 110,000 tion(40,000) 70,000 4,000 ortization 6,000	ADJ (1A) 2,000 +(1B) 5,000 (2) 5,000 (2A) (500) (3) 2,000 (8A) 2,000 (8B) (200)	$= \frac{20,000}{7,000}$ $= \frac{7,000}{165,000}$ $\frac{115,000}{(40,500)}$ $74,500$ $6,000$ $2,000$ $(200)$ $6,000$	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Ed Assets (cost) Accumulated Deprecia Intangible Assets Trade name Development Costs Less: Accumulated Am	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment 110,000 tion(40,000) 70,000 4,000 ortization 6,000 5,000	ADJ (1A) 2,000 +(1B) 5,000 (2) 5,000 (2A) (500) (3) 2,000 (8A) 2,000	$ \begin{array}{r} 20,000 \\ = 7,000 \\ 165,000 \\ 115,000 \\ (40,500) \\ 74,500 \\ 6,000 \\ 2,000 \\ (200) \\ 6,000 \\ 5,000 \\ 5,000 \\ \end{array} $	<i>Assets</i> 43,000 35,000
As of 12/31/2011 ASSETS Current Cash Accounts Receivable Investments(AFS) Inventory Total Current Assets Property, Plant and Ed Assets (cost) Accumulated Deprecia Intangible Assets Trade name Development Costs Less: Accumulated Ame Patent	s) US GAAP 43,000 35,000 20,000 <u>60,000</u> 158,000 quipment 110,000 tion(40,000) 70,000 4,000 ortization 6,000	ADJ (1A) 2,000 +(1B) 5,000 (2) 5,000 (2A) (500) (3) 2,000 (8A) 2,000 (8B) (200)	$= \frac{20,000}{7,000}$ $= \frac{7,000}{165,000}$ $\frac{115,000}{(40,500)}$ $74,500$ $6,000$ $2,000$ $(200)$ $6,000$	<i>Assets</i> 43,000 35,000

LIABILITIES and SHAREHOLDERS' EQUITY				
Current				Liabilities
Accounts Payable	30,000			30,000
Accrued Expenses	25,000			25,000
Taxes Payable-Current	15,000		(9) 1,150	16,150
Total Current Liabilities	70,000			71,150
Noncurrent				Liabilities
Bonds Payable	60,00	00	(6) ( 6,000)	54,000
Taxes Payable-Noncurrent			(1B) 1,250	1,250
Contingent Liability Payable	0		(5) 3,000	3,000
Total Current Liabilities	<u>60,000</u>		15,200	58,250
Total Liabilities	130,000		11,250	129,400
SHAREHOLDERS'				EQUITY
Common Stock (\$1 Par)	60,000		(6) 6,000	66,000
Surplus(Deficit)		3,000	(2B) 5,000 + $(3)$ 1,000 + $(4)$	4) (3,000) 6,000
Retained Earnings		<u>50,000</u>	(1B) 3,750 + (7) (300) +(9)	) 3,450 56,900
Total Shareholders' Equity	113,000		18,250 128,900	-
Total Liabilities and Shareh	olders' Equity	<u>243,000</u>	29,500	258,300

#### Financial Statement-IFRS Prepared Balance Sheet (in 000's) As of 12/31/2011

## **ASSETS**

EQUITY	
Cash	43,000
Accounts Receivable	35,000
Investments(AFS)	20,000
Inventory	<u>67,000</u>
Total Current Assets	165,000
Property, Plant and Equip	ment
Assets (cost)	105,000
Accumulated Depreciation	(30,500)
	74,500
Intangible Assets	
Trade name	6,000
Patent	6,000
Goodwill	5,000
Development Costs	1,800
(net of \$200 Accumulated A	mortization)
Total Intangible Assets	<u>18,800</u>
Total Assets	<u>258,300</u>

## LIABILITIES and SHAREHOLDRERS'

	Current Assets
Accounts Payable	30,000
Accrued Expenses	25,000
Taxes Payable-Current	16,150
Total Current Liabiliti	ies _71,150

#### **Noncurrent Liabilities**

Bonds Payable	54,000
Taxes Payable- Noncurrent 1	,250
Contingent Liability Payable	3,000
Total Noncurrent Liabilities	<u>58,250</u>
Total Liabilities	129,400

#### SHAREHOLDERS' EQUITY

Common Stock (\$1 Par)	66,000
Surplus (Deficit)	6,000
Retained Earnings	<u>56,900</u>
Total Shareholders' Equity	<u>128,900</u>

## Total Liabilities and Shareholders' Equity

#### 258,300

#### CONCLUSION

IFRS is the future of worldwide financial reporting and should be included as a major part of any accounting and/or business curriculum in the US, as well as the rest of the world. This case illustrates a situation where an Income Statement and Balance Sheet is prepared using US GAAP as a basis, and converting to IFRS for comparison purposes. In this case study IFRS rules are discussed, and key Income Statement and Balance Sheet similarities and differences between US GAAP and IFRS are addressed. We will follow up with other similar case studies which focus on an IFRS prepared Cash Flow Statement from a US GAAP prepared Financial Statement.

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#### BIOGRAPHY

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Liz Washington Arnold, The Citadel Peter Harris, New York Institute of Technology

#### ABSTRACT

This study examines corporate survival/recovery after corporate accounting malfeasance from an exploratory and empirical perspective utilizing 100 companies known to have committed corporate malfeasance from a previous study and the related matching non-malfeasance companies to whom they were compared in that study to see if the survival/recovery for the malfeasance companies fared any different than the non-malfeasance companies. This study will examine the current status of the companies relative to where they were during the time of the announce malfeasance from a bankruptcy, merger, market value (stock price increase or decrease) or accounting value (book value) change perspective, including whether there have been subsequent announced malfeasance for any of the companies in the previous study.

The research contributes to contemporary accounting literature by providing survival/recovery information for companies with announced malfeasance.

# EARTH WALL CONSTRUCTION: THE WAY OUT FOR AFFORDABLLE AND SUSTAINABLE HOUSING DEVELOPMENT

Amao Funmilayo, Ladoke Akintola University of Technology

#### ABSTRACT

Nowadays all around the globe, people, communities, and counties are committing themselves to appropriate technologies, discovering that they can use native talent, resources, and financing to solve their own problems. The issue of Affordable and Sustainable housing development for the low income workers is still an illusion in Nigeria today. This arises as a result of financial and technological incapability. Therefore, the paper examines the suitability and potential of the use of local constructional materials to addressing housing affordability in the country. The secondary data used for this paper is gotten from detailed Literature review from relevant published journals, books and seminar papers. The paper examines evaluation of the existing program of housing delivery and the paper found out that the issue of Affordable Housing provision in Nigeria did not yield much result due to high cost of provision. The paper conclude by recommending the use of Earth as a local building material for Housing construction in order to reduce the cost of housing and make Sustainable Housing Provision a reality in Nigeria especially for the poor. The conclusion is that we cannot be importing materials from other nations but rather evolve workable models based on our locally available materials.

#### **JEL:** E01

**KEYWORDS:** Housing, Affordable housing, housing delivery, Earth, Sustainable Housing provision.

#### **INTRODUCTION**

The United Nations estimates that Nigeria's population in 2005 stands at 141 million, and predicted that it would reach 289 million by 2050 (Encarta, 2007). The United States Census Bureau projects that population of Nigeria will reach 264 million by 2050. Nigeria will then be the 8th most populous country in the world (Encarta, 2007). Rapid growth in population creates demand pressure towards shelter and efficient supply and distribution of basic utilities and services for the city dwellers, In most of our urban centers the problem of housing is not only restricted to quantity but to the poor quality of available housing units .

#### Need for Affordable Housing

Nigeria is perhaps the fastest urbanizing country in the African continent. One of the most important challenges facing the country is the provision of affordable housing. As more and more Nigerians make towns and cities their homes, the resulting social, economic, environmental and political challenges need to be urgently addressed (Raji, 2008). A recent study of housing situation in Nigeria put existing housing stock at 23 per 1000 inhabitant. Housing deficit is put at 15 million houses (Mabogunje, 2007) while N12 trillion will be required to finance the deficit. This is about 4 times the annual national budget of Nigeria (FHA, 2007).

#### Current Housing Delivery Approach

In 2003, the federal government also established the Federal Ministry of Housing and Urban Development, and Proposed a Housing Reform, in view of the fact that there were not many affordable houses in Nigeria. There was an illusion that houses were available. But most of them were high-priced. Mabogunje, 2004 opined that a number of other legislation needs to be amended substantially to bring their provisions in line with the new housing regime. The period 2003 - 2004 witness a Housing policy that recognized the private sector on the driving seat of housing delivery in the country, the key features of this policy include the placement of the private sector in a crucial position, for the delivery of affordable houses, on a sustainable basis; assignment to government of the responsibility for the development of primary infrastructure for new estate development.

*Affordable Housing Scheme:* There are several affordable housing schemes that are either fully funded by government or in partnership with the government under the Public Private Partnership (PPP) scheme. In some cases selected developers were given some kind of concession by government with the aim of providing affordable housing for instance, in the Federal Capital Territory. Such efforts were further complemented with the Private Finance Initiative (PFI). Jibrin (2009) further argued that while the quality of the existing stock is also under a heavy scrutiny in term design and desired functions including acceptable livable neighborhood, 87% of the existing stocks are backlogs which are stocks that do not meet the minimum quality requirement.

*Site and Services Scheme:* The pressure for this came from the international lending community and in particular the World Bank. Given the rising figures of 'spontaneous or squatter settlements', in cities all over the third world, in the face of tight planning control, regular demolitions, and high-cost construction programs, the World Bank argued for a new approach to urban development which incorporated various forms of aided self-help (World Bank, 2005). The two 'packages' which received the most support were sites and services scheme, and upgrading schemes.

#### LITRATURE REVIEW

#### Earth

Earth is the oldest most widely used building material in the world today. It is an appropriate, abundant, inexpensive, eco-friendly, and energy-efficient technology. Buildings with raw earth as well as stabilized earth avoid deforestation and pollution, and can achieve low energy costs throughout their existence: during their manufacturing and construction process as well as during their use as homes, offices, communities etc., and ultimately in their recycling back to the earth. The type of earth materials available locally will of course vary depending upon the conditions in the area of the building site. In many areas, indigenous stone is available from the local region, such as limestone, granite, and sandstone. The use of locally available and indigenous earth materials has several advantages in terms of sustainability like:

- Reduction of energy costs related to transportation.
- Reduction of material costs due to reduced transportation costs.
- Support of local businesses and resource bases.

Care must be taken to ensure that non-renewable earth materials are not over-extracted. Ecological balance within the region needs to be maintained while efficiently utilizing its resources. Both brick and stone materials are aesthetically pleasing, durable, and low maintenance. Exterior walls weather well, eliminating the need for constant refinishing and sealing. Interior use of brick and stone can also provide excellent thermal mass, or be used to provide radiant heat.

*Mud Wall:* Mud is the natural building material that is absolutely different from wood, rock, and cement or metal. Owing to durability and recycling ease, mud can be formed for our shelters and it can be reformed back to nature, to be simple soil on earth. Moreover, mud is harmonized with all environments and good for being a passive air-conditioning system. Thus living in mud-house is comfortable year round. Frugality and reuse in mud-house construction can create tremendous saving in environmental impact, energy use and capital expenditure. Mud from earth or soil is one of the most widely used traditional building materials throughout the world. All mud-house constructions use just simple local materials, mainly are soil and water, added up with paddy husky or rice straw or local fiber weed.

#### Construction Techniques

Basically, there are roughly eight types of mud-house construction techniques:

*Rammed Earth:* Damp earth lay between formwork and mould and compacted by ramming; wall baring system.

Adobe: Sun-dried brick [soil, water and local fiber materials] bonded with clay mortar; wall baring system.

Cob: Fresh lumps of mud [soil, water and local fiber materials] stacked on each other; wall baring system.

*Wattle and Daub:* Woven work of sticks intertwined with twigs or bamboo covered with mud; framework system.

*Cordwood or Stone:* Left over materials like slender shoot of a tree or tiny stone bonded with mud [soil, sand and paddy husk]; wall-baring system.

Earthen Bag: Stacking the sags of damp earth hooked up with thorn or barbed wire; wall baring system.

*Straw-bale:* Plastering the bundle of hay with mud; the structure can be both skeleton and wall baring system.

#### Advantages:

#### Environmental Impact

- To save natural resources
- -Using neither cement nor rock (Save our mountains)
- Using just a little wood (Save our forests)
- To save building materials
- Main materials are soil and water, mixed to be mud

#### Energy use

• To save energy

- Cool in summer (Inside building temperature is about 24°c to 26°c)

- Warm in winter (Automatic temperature control by passive cooling system)

The advantages of earth construction are multiple and complementary and are reviews as follows: -

- Appropriate use of material considerably reduces construction cost (Zami & Lee et al, 2007) and hence stimulates the economy. Earth construction allows appreciable economies to avoid excessive expenditure of energy.
- Earth is easy to work with using simple tools and less skill. So, it encourages and facilitates selfhelp and community participation in house building (Kateregga, 1983).
- The higher the ratio of non-manufactured local materials the lower the ratio of man-made energy. Earth is nature's product; it requires no energy to produce, it saves man-made energy, it is labour intensive, and it is in plentiful supply and enduring. Contrary to popular belief, earth provides the natural comforts of balanced temperatures, humidity and noise control (Alphonse et al, 1985).
- Earth has such a low rate of thermal conductivity; warmth takes almost 12 hours to work its way through a 300mm thick wall (Cassell, 1993). The sun's warmth will actually be reaching the interior of the house during the cold hours of the night, yet the walls insulate the interior from summer temperatures (Kateregga et al, 1983).
- According to Cassell (1993), besides insulating and storing heat, rammed earth also allows more air exchange than does any comparable material. A rammed earth house breathes without suffering any significant heat loss. This is especially important today because the interior of houses are 5 to 7 times more polluted than the outside.
- Earth is a good noise absorbent which is a desirable quality in house design (Kateregga, 1983)
- The thick walls also provide a feeling of security which goes beyond their warmth and strength. Moreover, putting metal grills on window and door openings can make a house fortress. The compression strength of rammed earth is higher than that of a concrete wall of similar thickness (Houben & Guillaud, 1989) thus making a rammed earth building nearly as durable as a bomb shelter.
- A rammed earth wall is about 40 percent cheaper to build than a standard stud wall, including labor (Cassell, 1993). Rammed earth is not just an economy construction technique it results in some of the most pleasant, comfortable, and energy- efficient buildings available at any price (Zami & Lee, 2007). Using tinted stucco, the pise builder can finish his house in almost any color or architectural style (Houben & Guillaud, 1989).
- Since this natural material can be used locally with reduced transport costs (Kateregga et al, 1983) and without secondary industrial transformation.
- Earth building can be seen as a means of creating employment (Zami & Lee, 2007).
- Earth is very good in fire resistance (Alphonse et al, 1985).

According to Cassell (1993), the two historical disadvantages to rammed earth has been water damage and labor intensity. Labor intensity has been solved by the use of gasoline and pneumatic powered tamping devices (Beyond 2000). Kateregga (1983) listed the following weaknesses of earth (unstabilised) in building construction: -

- Its poor and very low load bearing capacity makes it unsuitable for supporting heavy roofs from large span building.
- It has a very high moisture (water) absorption ratio which also contributes to its
- Structural failure.
- Earth has a low binding strength for its particles and this contributes to its low compression strength.
- Earth has a very high shrinkage/ swelling ratio resulting in major structural cracks when exposed to different weather conditions

It has a low resistance to wear and tear, less durable and calling for frequent repairs and maintenance when used in building construction works. Also, according to Dunlap (1993), a significant problem associated with the construction of earthen buildings is the lack of standard criteria to evaluate the finished product.

#### **TYPES OF EARTH WALL FINISHES**

*Natural Plasters:* Plaster is used as front-line defense for moisture intrusion into the structure, and is employed to help control moisture within wall assemblies. Plaster helps to protect walls from premature wear and abrasion. Natural plastering is a truly ancient form of building, found in civilizations throughout history. Since some of the earliest habitations, humans have been covering their walls, for decoration and performance, first with earth, then with lime and gypsum. These three substances — lime, gypsum and clay — are the basic materials known as natural plasters; these stand in contrast to cement-based stuccos, which are far more common in the modern industrialized world due to their speed of set and ease of uniform mass production.

*Mud Plaster:* Mud plaster is usually applied in two coats for both exterior and interior surfaces. The addition of straw is recommended in the mud plaster mix. This will help to reinforce the plaster, allowing for thicker coats and surface levelling. In addition, this will decrease the tendency for cracking of the plaster as it dries. High clay content soils in mud plaster may tend to result in a poor bond of the plaster to the wall. The finish coat is made of screened, fine materials. This layer is applied as thinly as possible while achieving full coverage. Plaster can be towelled or floated to achieve a variety of textures, and reapplied as many times as necessary to achieve the desired affect or to make repairs. When dry, the mud plaster surface will take a hard, firm set similar in hardness and texture to conventional plaster. The same stabilizers used in the preparation of the structural soil mix may be used to stabilize the plaster. Thorough mixing of the plaster mix is necessary to avoid an uneven finish.

#### Cement Plastered Finish

An earth wall is made using soil mixed with water and some cement. These rooms are very comfortable to stay in during the hot weather. The earth walls do not absorb heat. After the earth wall is constructed, it is usually very rough. The wall may be finished using various methods. The wall can be plastered with cement or lime. This allows for other decorative finishes like paint. It is prepared in the form of mortar with cement, sand and water in proper proportions and applied on masonry manually to achieve a smooth finish or sand faced finish. Traditional cement stucco may be used on walls for a low-maintenance finish. While this may seem desirable, cement stucco also has disadvantages in that it has a different expansion coefficient than the wall material. This may eventually lead to separation from the wall, and may conceal structural erosion problems which may result from leaky pipes or roofs. Stucco netting is recommended to accommodate any settling and cracking of the stucco. Exterior stucco walls should not be painted with traditional exterior paints, which will increase moisture impermeability. A final colored coat of stucco or texture finishes may be used decoratively.

*Pebbles Finish:* This a very simple and attractive finish obtained by pasting small pebbles on the walls with cement mortar as an adhesive. Pebbles finish is usually preferred for exterior facade. It is also commonly used to give nice flowing effect to the waterfalls that are created especially designed for Hotel Interiors or as a part of Exterior Landscaping.

*Flakes Finish:* It is a special material used to enhance the elevation treatment of the building. It is majorly used for the exterior facade. It has also been used for the interiors but to a very small extent. Application of flakes finish is avoided in the interiors because chipping off of flakes is a trouble. The flakes are applied with a trowel on walls over a coat of adhesive.

*Coral Finish:* Coral finish is similar to Plaster of Paris Finish and Gypsum Plaster Finish. Coral is the name of a type of plastering material. It gives a rough edgy finish.

*Canfor Finish:* Canfor finish is also known as faux finish. This material is used for the interiors of residences. It adds a unique aesthetic appeal to the place. It comes in 6mm thickness and in different designs. This finish is chosen when a false finish is to be given. It gives a stone wall or brick wall effect.

*Tile Cladding:* Different tiles, for example, granite, marble, glazed tiles or vitrified tiles are used for tile cladding. Tiles are available in a variety of colors and shapes. The selection of tiles depends on the place where it is to be applied i.e. interior facade or exterior facade. Tile Cladding

*Sand Textured Finish:* Sand Textured finish is used to give fine texture to the wall. This wall finish is not very commonly used because of its grains coming out. Sand Textured Finish

*Textured Wall Coating:* Decorative or textured concrete products are a type of wall coating material which decorates any wall surface and replicates a realistic brick wall or natural stone by texturing the wall. Wall textures can be used on a new wall or to renovate an old wall. Wall coating material can be applied on wood, concrete or stone surfaces. It is widely used today because of its quality of keeping the wall durable and elegant in spite of being subject to harsh weather conditions.

*Venetian Plaster Wall Finishes:* Evolving since 7500 B.C., Venetian Plaster's ingredients have evolved from lime, sand and marble dust to synthetic "Venetian plaster" often consisting of acrylic based plaster and water based waxes. Luckily, though hard to find, authentic Venetian Plaster is still available today. It has been a timeless wall finish that looks magnificent and improves as it ages.

*Tiled Wall Finishes:* Usually tiled wall finishes appear in bathrooms. Tiled walls are effective against moisture created from the shower. Fortunately there are sealants that are effective against moisture, making a plaster wall finish a possibility in bathrooms.

#### METHODOLOGY

In order to reach the above mentioned objectives, the study included secondary data. The secondary data involved available census data, official documents, the national housing policy and other relevant secondary data were obtained from existing literature, on books, journals and housing market.

#### **RESULTS AND DISCUSSION**

#### Evaluation Of Benefits Of Using Earth Materials For Construction

*Healthy and Environmentally Friendly:* Earth wall construction are non-toxic, non-polluting and 'breathes'. This creates safer, more people-friendly buildings. It is very low in embodied energy, and extremely comfortable to live in.

Cost Effective: Unlike most types of walls, earth wall and finishes are cost effective.

*Strong and Durable:* Research has proved that wall with earth materials can withstand pretty much anything nature can throw at it.

Low Maintenance: Earth wall finishes are permanent and require little on-going maintenance.

*Thermal Mass:* The thickness and density of the material means that heat (or cold) penetration of the wall is very slow and the internal temperature of the building remains relatively stable, with the end result of it feeling warmer in winter and cooler in summer than the outside temperature e.g. natural plaster

*Noise Reduction*: The thickness and density of the walls mean that unwanted sounds such as traffic noise are kept out.

*Fire Proof:* Earth materials have very good resistance to the fire outbreak

*Aesthetic:* Architects are using earth wall and finishes in commercial and domestic buildings of many styles and for many functions. Variations in texture, colour and finish are possible. It is a natural product which blends beautifully with the environment and other natural building materials.

#### RECOMMENDATIONS

Housing is a critical component in the social and economic fabric of all nations. No country is yet satisfied that adequate housing has been delivered to the various economic groups that make up its citizenry. Thus, most nations, in one form or another continue to claim a housing problem. Building materials is believed to have constituted 55% to 65% of total cost of construction input. Indigenous building materials have potential for enhancing mass housing development, but regrettably stakeholders have not embraced them. For sustainable housing delivery, both private and public developers should shift from over dependency on imported materials to the use of local materials such as earth for wall, roofing and floor materials that are affordable and durable. An inward approach and enlightenment of the public services and professionals in the industry of the efficiency of local materials will enhance housing delivery and affordability. The establishments of small and medium size companies for the exportation, manufacturing and coordinated network distribution of building materials will greatly enhance housing delivery. In all, workable national policy framework where the duties and responsibilities of each stakeholder in housing delivery will be stipulated will assist sustainable mass housing delivery in Nigeria.

#### CONCLUSION

The basis of Earth as building materials is the need to reduce the environmental impact of buildings and provide affordable housing to the masses, without sacrificing comfort, health or aesthetics. To be more sustainable, natural earth wall use primarily abundantly available, renewable, reused or recycled materials. The use of rapidly renewable materials is increasingly a focus. In addition to relying on natural finishing materials, the emphasis on the architectural design is heightened. Earth wall construction involves a range of building systems and materials that place major emphasis on sustainability. Ways of achieving sustainability through natural finishes focus on durability and the use of minimally processed, plentiful or renewable resources, as well as those that, while recycled or salvaged, produce healthy living environments and maintain indoor air quality. Earth is also affordable and available and would be appropriate in the case of low cost house construction in Nigeria. The only challenge that prevents earth becoming the preferred choice of building material amongst people is the acceptability of this material. An awareness and understanding by people to environmental issues such as air pollution, deforestation, land degradation and energy conservation would help them change their attitudes and views towards earth building and finishes. The flexibility and simplicity in technology incorporated in earth building affords adaptability and easy transfer of knowledge between different stakeholders in the building industry.

Individuals and community as a whole can easily participate in building their own homes in affordable ways.

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#### BIOGRAPHY

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# LEADERSHIP IN CONTEXT: THE MODERATING EFFECT OF FOLLOWER NEED FOR AUTONOMY ON DIRECTIVE LEADERSHIP STYLE, EMPOWERING LEADERSHIP STYLE, AND LEADER EFFECTIVENESS IN VOLUNTEER ORGANIZATIONS

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#### ABSTRACT

This research paper proposed and tested a leadership framework based on the moderating effect that follower need for autonomy has on the relationship between directive leadership style, empowering leadership style, and perceived leader effectiveness. Building on Fiedler's (1967) contingency theory of leadership, this paper proposed and tested the concept that the level of a follower's need for autonomy moderated the effectiveness of a leader based on the leadership style utilized. This research study focused on directive leadership and empowering leadership in volunteer organizations to determine followership perceptions of leaders based on the leadership style chosen and the follower's level of need for autonomy. Survey data, obtained from a mid-sized volunteer organization in Southern California, supported one of the two hypotheses proposed in this research paper. In addition, an unexpected negative relationship was noted pertaining to the supported hypothesis regarding follower need for autonomy and empowering leadership style.

#### INTRODUCTION

The concept of leadership styles and leader effectiveness has been studied and researched in earnest for several decades (Durham, Knight, & Locke, 1997; House, 1971; Kahai, Sosik, & Avolio, 1997; Manz, 1986). However, surprisingly little has been published regarding the role that context plays in leadership effectiveness, and even less has been published on the moderating role that follower autonomy has on the relationship between leadership style and leader effectiveness in volunteer organizations. Vardiman, Houghton, and Jinkerson (2006) stated: "Effective leadership within an organization is often viewed as the foundation for organizational performance and growth. Organizations that lack strong leadership are likely to fail to meet performance expectations" (p. 93). Unlike their paying business counterparts, volunteer organizations rely heavily on individuals who are committed to the organization and will give of their time, money, and resources to ensure the volunteer organization remains successful and operating. From a leadership effectiveness perspective, leaders must learn how to effectively connect with their volunteers and build commitment at every level of the organization.

To reduce the possibility of volunteers withdrawing their time, resources, and finances from becoming a reality, leaders must effectively choose the leadership style most appropriate to the situation or context in order to maintain high levels of volunteer commitment. This leadership perspective is supported by Fiedler's (1967) contingency theory of leadership, which states that no one leadership style, behavior, or attribute is suitable for all situations, and is widely used to explain how no one leadership style is appropriate for all situations and contexts.

#### LITERATURE REVIEW

This research focused on two distinct leadership styles: directive leadership and empowering leadership. Surprisingly little has been published in peer-reviewed scholarly leadership journals concerning the use of

directive leadership in organizational settings. One research study conducted by Mehta, Dubinsky, and Anderson (2003) measured the effects of leadership style in a global competitive market.

Empowering leadership is described as emphasizing employees' reliance on self-influence rather than hierarchically controlled processes (Houghton & Yoho, 2005). Leaders are encouraged to use empowering leadership styles because "leaders are limited in terms of time, energy, knowledge and scope of authority. Some followers might be more highly motivated if given greater decision authority" (Yun, Cox, & Sims, 2006, p. 375). D'Intino, Goldsby, Houghton, and Neck (2007) conducted research on the effect that individual differences have on self-leadership effectiveness. Regarding the need for autonomy, D'Intino et al. stated: "The need for autonomy is the extent to which a person needs or is eager to express individual initiative in performing a job" (p. 112). The research published by D'Intino et al. referenced research conducted by Yun, Cox, and Sims (2006) and Roberts and Foti (1998) and found that individuals who scored high in need for autonomy preferred to engage in self-leadership, while those who scored low in need for autonomy were more satisfied in a structured environment.

Mehta, Dubinsky, and Anderson (2003) stated that leadership effectiveness is as vague a concept as the definition of leadership itself and even more difficult to accurately measure. Very few leadership effectiveness instruments exist, and those that do focus on leader behaviors, charisma, rhetorical skills, intelligence levels, and personality traits (Bass & Yammarino, 1988; Hazucha, 1992; Hogan, Curphy, & Hogan, 1994; Komacki, 1986; Shamir, Arthur, & House, 1994). Mehta et al. found that leadership effectiveness is measured at both the organizational level and the leader's subordinates with the impact of leadership on subordinates usually focusing on subordinates' satisfaction with their leader's leadership style (p. 28).

#### METHODOLOGY

#### Data

Participants were recruited from several volunteer organizations throughout the local area, including churches, a food bank, and a youth sporting establishment; however, only one volunteer organization provided approval for their volunteers to participate in the research. A purposive sampling technique was employed at a mid-sized church in Southern California where the sample (N) consisted of 87 volunteers from two separate campuses. Eighty seven questionnaires were submitted and returned, but 8 questionnaires were excluded due to being incomplete. Participation in the study was both voluntary and anonymous.

#### Measures

This research paper combined instruments used to measure directive leadership style, empowering leadership style, follower need for autonomy, and leader effectiveness to determine what moderating effect, if any, follower need for autonomy has on perceived leader effectiveness. A compilation of the Essential Behavioral Leadership Quality instrument (Oyinlade, 2006), the Follower Need for Autonomy instrument created by Yun, Cox, and Sims (2006), the Empowering Leadership Questionnaire created by Arnold, Arad, Rhoades, and Drasgow (2000), and the Leader Behavior Description Questionnaire created by the Personnel Research Board at Ohio State University and revised by Stogdill (1963) generated a quantitative 49-item Likert-like questionnaire designed to measure a respondent's need for autonomy, their perceived leader's style of leadership, and their leader's perceived level of leader effectiveness.

#### **RESULTS AND DISCUSSION**

In order to predict perceived leader effectiveness using directive leadership style, empowering leadership style, follower need for autonomy, controlling for age, number of times volunteered per month, tenure, and work group size, a multiple regression analysis was performed. The regression analysis model summary showed that the control variables (Table 1) in Model 1 accounted for 11% of the variance in leadership effectiveness; however, the results were not more significant than a constant. Adding directive leadership style, empowering leadership style, and follower need for autonomy to the model increased the R<sup>2</sup> by .59 (accounting for 59% more of the variance in leadership effectiveness). Model 2 listed all the variables and accounted for 77% of the variance in leader effectiveness. It was found that empowering leadership style significantly predicted leader effectiveness ( $\beta = .68$ , p < .01).

Table 1: Regression Analysis

Model	R	R Square	Adjusted R Square	SE		Chang	e Statisti	cs	
					R Square Change	F Change	df1	df2	Sig. F Change
1	.11	.01	06	1.01	.01	.16	4	55	.96
2	.77	.60	.55	.66	.59	25.41	3	52	.00

To test the moderating effect that follower need for autonomy had on the independent variables of directive leadership style and empowering leadership style, multiple linear regression was performed on follower need for autonomy and empowering leadership style.

Table 2: Moderation Test of FNA and ELS

Model	R	R Square	Adjusted R Square	SE	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.76	.58	.56	.65	.58	38.52	2	57	.00
2	.79	.63	.60	.62	.05	7.11	1	56	.01

The moderation was tested by creating an interaction variable (FNA \* ELS) which was used in the regression testing to determine if empowering leadership style and leader effectiveness were moderated by follower need for autonomy. As Table 2 shows, the R<sup>2</sup> change was .05 when the interaction variable was added to the predictor and moderator variables. This change was significant, F(1,56) = 7.11, p = .01. This interaction showed that the presumed moderator did moderate the effect of empowering leadership style on leader effectiveness. In addition to these findings, an unexpected result was reported regarding the correlation between follower need for autonomy and empowering leadership style. Table 3 shows a negative relationship between follower need for autonomy and empowering leadership style when the multiple regression analysis was performed.

	Model	Unstandardi	zed Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	2.13	.79		2.69	.01
1	FNA	04	.16	02	26	.79
	ELS	1.06	.12	.76	8.78	.00
	(Constant)	1.71	.77		2.22	.03
2	FNA	.01	.15	.01	.02	.98
2	ELS	1.12	.12	.80	9.58	.00
	FNA*ELS	28	.11	23	-2.67	.01

#### Table 3: Coefficients Table for FNA and ELS

This result was counter-intuitive to what was expected, and after investigating for a possible root cause, it was determined that the eleven items from the Arnold, Arad, Rhoades, and Drasgow's (2000) Coaching scale were worded to measure empowering leadership as it related to work groups, as opposed to how it related to individuals.

### CONCLUSION

The results of this study supported the hypothesis that follower need for autonomy moderates the relationship between empowering leadership style and leader effectiveness such that when follower need for autonomy was high, an empowering leadership style would be perceived as more effective. These findings were consistent with the current literature and theory outlined within this study and reinforced the research conducted by D'Intino, Goldsby, Houghton, and Neck (2007) which found that individuals who scored high in need for autonomy preferred to engage with empowering leaders.

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#### BIOGRAPHY

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# EFFECTS OF OWNERSHIP ON HOSPITAL PERFORMANCE IN CHINA

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#### ABSTRACT

In recent years, Chinese health care has rapidly improved, especially in the areas of equity and accessibility of services. Like in many other countries, the controversy over the roles of the public and the private sectors in health service delivery, particularly in hospitals, has waged for a long period of time. Policies began to take effect in 2000 and were reinforced in 2009; such health policy reforms, for the first time, prominently called for the expansion of private investments in health-service-delivery in China. Does the performance of health service delivery systematically differ by ownership form? We have analyzed data from 148 Beijing public and private hospitals in 2004 to shed light on this important policy question. The data are unique and reliable, which originate from the Beijing Health Bureau. A data envelopment analysis (DEA) is used to evaluate the technical efficiency score for the panel of Beijing's public and private hospitals. We have found that public hospitals have a lower efficiency score in the results from a comparison of two DEA models. The role of private hospitals in medical reforms is essential. Progressive privatization and decentralization will be the panacea in Chinese hospital system reforms.

**KEYWORD:** private hospitals, ownership, data envelopment analysis, performance, technical efficiency, China

# A DYNAMIC PANEL MODEL OF CAPITAL STRUCTURE AND AGENCY COST IN NIGERIAN LISTED COMPANIES

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#### ABSTRACT

This study examines the impact of agency costs on capital structure of Nigeria listed companies for the period of 2000-2006. Using a dynamic panel model, the study shows the extent to which asset utilization helps explain the financing structure of Nigerian firms. The main finding shows an inverse relationship between capital structure and agency costs of Nigerian firms. Thus, the negative coefficient on the agency cost variable suggests that, on average, the management of Nigerian firms choose either to use retained earnings or to issue new equity offer. Studies have shown that managers have a natural tendency to be cautious about borrowing, given that they have more to lose if the firm goes into liquidation, compared to shareholders with a diversified asset portfolio. Hence, a rise in the ratio of total sales to total assets (agency cost) would mean the management team is efficient in using the company's assets to generate wealth for their shareholders.

**KEYWORDS:** Capital structure, agency costs

#### **INTRODUCTION**

In their paper, Modigliani and Miller (1958) showed the assumptions under which financing decisions do not affect the value of the company. They state which factors should influence financing decisions of companies. Financial theorist, for example, Sander (2007) has subdivided capital structure determinants into three layers. Layer 1 included fundamental factors such as *returns, risk,* and *value*. Layer 2 comprised classical theories including *tax, bankruptcy* and *agency costs* among others. Layer 3 included practical factors such as *legal regulation, the life cycle of a company, human psychology, market conditions, credit ratings, shareholder preferences* and *risk management consideration*. However, discussion in this paper will be concentrated on agency costs as it affects the financing decision of Nigerian companies. It is one of the important classical capital structure theories underpinning previous capital structure studies. Despite its numerous challenges Nigerian economy display a futuristic prosperity and growth with concomitant high return on investment. Firstly, this study contributes to the present debate on the impact of agency costs on capital structure of Nigeria listed companies. Secondly, this the first empirical analysis of capital and agency costs in Nigeria using advanced econometric models.

#### Brief outline of related literature

Agency costs theory popularized by Jensen and Meckling (1976) and Myers (1984) suggests the separation of ownership and control in a modern corporation may lead to array of conflicts from several sources. For instance, the separation of ownership from control in large public corporations may induce conflicts between creditors and the firm and between managers and shareholders. This may pitch the owners (principals) against the management (agents) given that managers as agents are not entitled to 100 percent of the residual claims resulting from their professional responsibilities and expertise in running the affairs of the business. They, however, bear the entire costs of these activities and, in the event of financial distress or corporate takeovers, they will be the first in the firing line. It is assumed that faced with this situation, managers of corporations may therefore put less effort into value enhancement activities in the firm through sub-optimal investments.

Conflicts may also occur between creditors and shareholders, or between shareholders and other stakeholders such as customers, suppliers, employees, and competitors. As suggested by Myers (1993), conflict between shareholders and creditors may emerge as a result of underinvestment or overinvestment practices by the firm's management. Agency literature has focused on the role of debt as a means of disciplining managers. Grosseman and Hart (1982) were the first to argue that managers could precommit to work hard by using debt rather than equity. Similarly, Jensen's (1986) free cash flow theory considers additional debt as beneficial since the firm attempts to improve the productivity of its assets because of additional debt acquired. Debt not only reduces the free cash flow available to manager but also provides discipline to management through the debt market.

Debt monitoring hypothesis is formalised by Harris and Raviv (1990) and Stulz (1990) and empirically demonstrated by Shleifer and Vishny (1997) provided extensive survey on the role of debt in reducing the conflict of interests between managers and shareholders. On the other hand, increased leverage also has costs. As leverage increases, the usual agency costs of debt rises, including bankruptcy cost (Jenson 1986). Myers (1977) pointed to the debt overhang problem where firms may forego good projects if they have significant debt outstanding. The reason is that for a firm facing financial distress, a large part of the returns to a good project go to bondholders. Therefore, in choosing their debt-equity level, firms should trade off between the agency costs of debt and the agency costs of equity. By appropriately allocating refinance between equity and debt, capital structure can balance the conflicts between investors and management as well as that between management and creditors.

#### Data

The data for our study were obtained directly from the Nigerian Stock Exchange, the Central Bank of Nigeria, and the Nigerian Securities and Exchange Commission. To check the authenticity of data, we compared it with those made available by some of the companies on their respective web sites. Further, we excluded firms with less than 8 years of continuous time series data on their total liabilities, total assets, and earnings before interest and tax between 2000 and 2006.

In this paper, we have chosen to define corporate leverage as the book value of the total liabilities (i.e., the sum of short-, medium-, and long-term debts) divided by the book value of total assets. The outcome measures the percentage of funds provided by sources other than equity finance. The use of such a broad definition is in recognition of the fact that for many firms, especially those in emerging economies like Nigeria with underdeveloped capital markets, a combination of short and medium-term finance, including bank overdrafts and trade credits form the greater part of their funding requirements. Moreover, as noted by Chen (2003), the use of such book values helps avoid the limitations of missing information on the share of company stocks issued and openly traded on the stock exchange as well as on the gains in capital value arising from a dramatic rise in asset prices. Thus, the use of the book value of total liabilities relative to total assets has since been recognized as the broadest definition of the leverage ratio as it captures all the percentage ratio of funds provided by the short- medium and long term borrowings of a firm.

#### **Findings**

Our major findings reveal that impact of agency costs theory on capital structure as found in the developed and emerging economies is relevant in Nigeria. Our result shows an inverse relationship between capital structure and agency cost i Nigeria. It indicates that companies with a higher debt to asset ratio have higher ratio of sales to assets. This is statistically significant at the conventional five percent confidence level. This finding is consistent with Jenson (1986) theory that debt can reduce the agency costs of free cash flow by reducing the cash flow available to managers. It is also consistent with previous studies including. Li and Cui (2003), Ang *et al* (2000) and Singh (2002).

Given this result and challenges of the Nigerian capital market and the economy in general, we make the following recommendations among others. *First*, the government needs to implement policies aimed at increasing the depth and efficiency of the market so as to "correctly" price shares. Such market-orientated reforms involve initiatives which will encourage a greater openness and private sector participation in the economy. Then too, policies should be introduced to automate trading on the stock exchange as well as to educate all registered asset managers on the linkages between risk and expected returns. Moreover, agency costs arising from the conflicts of interest between managers and external providers of finance can be mitigated by setting up regulatory bodies with legal powers to enforce the rights of investors. Also, an independent arbitration agency should be set up to settle disputes between firms and their employees, together with an ombudsman who deals with complaints by customers, suppliers and other companies. Furthermore, regulations that ensure that firms publish timely and accurate information in their accounts, as well as the provision of competent and trusted auditors, will help reduce the potential costs of financial distress for external investors.

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# Appendix Table 1: Leverage ratio of Nigerian Listed firms and its major determinants: Descriptive statistics from 2000-2006

Iten	n		Mean	Standard deviation	Min	Max	Correlation with the leverage ratio
1.		Total liability percentage of total assets (leverage ratio)					iereruge ruite
	а	A Panel of ninety-four listed firms	0.38	0.20	0.02	0.0.85	1.000
	b	Manufacturing companies	0.38	0.19	0.02	0.83	0.03
	c	Firms with more than 30 percent foreign ownership	0.36	0.20	0.05	0.83	-0.05
	d	Firms aged 25 years and above	0.36	0.19	0.07	0.80	-0.04
2.		Standard deviation of earnings before interest and tax (business risk)					
	а	A Panel of ninety-four listed firms	0.16	0.10	0.08	1.90	0.15***
	b	Manufacturing companies	0.15	0.12	0.08	1.87	-0.10***
	с	Firms with more 30 percent foreign ownership	0.15	0.05	0.08	0.43	-0.06
	d	Firms aged 25 years and above	0.16	0.09	0.11	1.13	-0.01
3.		Total Sales percentage of total assets (agency costs)					
	а	A Panel of ninety-four listed firms	1.77	1.26	0.13	6.33	-0.16***
	b	Manufacturing companies	1.71	1.54	0.13	5.86	-0.08**
	с	Firms with more 30 percent foreign ownership	1.95	1.19	0.14	5.86	0.11***
	d	Firms aged 25 years and above	1.98	1.25	0.25	6.12	011***
4		Total fixed assets percentage of total assets ratios (tangibility)					
	а	A Panel of ninety-four listed firms	0.57	0.19	0.09	0.93	0.04
	b	Manufacturing companies	0.56	0.19	0.08	0.92	-0.08**
	с	Firms with more 30 percent foreign ownership	0.56	0.20	0.10	0.93	-0.03
	d	Firms aged 25 years and above	0.58	0.19	0.12	0.93	0.07*
5		Earnings before interest and tax percentage of total assets (Profitability)					
	а	A Panel of ninety-four listed firms	0.11	0.19	-0.82	088	-0.16***
	b	Manufacturing companies	0.13	0.21	-082	0.88	0.18***
	с	Firms with more 30 percent foreign ownership	0.17	0.19	-0.33	0.88	0.23***
	d	Firms aged 25 years and above	0.12	0.19	-0.59	0.88	0.05
6		Log of total sale revenues in millions of Naira (size)					
	а	A Panel of ninety-four listed firms	7.38	1.95	1.44	11.36	-0.06
	b	Manufacturing companies	7.64	1.90	1.44	11.36	0.21***
	c	Firms with more 30 percent foreign ownership	8.46	1.45	3.55	11.37	0.44***
	d	Firms aged 25 years and above	8.41	1.41	4.17	11.36	0.36***
7		Total assets annual percentage change (growth prospects)					
	а	A Panel of ninety-four listed firms	20.00	37.00	-72.21	214.16	-0.06
	b	Manufacturing companies	19.04	36.00	-572.20	214.16	0.02
	c	Firms with more 30 percent foreign ownership	20.31	35.04	-59.68	196.55	0.000
	d	Firms aged 25 years and above	18.14	30.59	-59.68	176.41	0.02

Note

1. Manufacturing are firms officially classified as manufacturing by the United Nations International Standard Industrial Classification (ISIC). Foreign companies are firms having more than thirty percent overseas share ownership and

2. Old companies are those that are more than twenty-five years old.

3. \*\*\* Statistically significant at 1% confidence level, \*\* Statistically Significant at 5% confidence level, and\* statistically significant at 10% confidence level.

4. The numbers in bracket in column, 1 item 1 represent the numbers of our Nigerian listed firms in the manufacturing sector that have more than 30% of foreign ownership and aged 25 years old and above.

l structure N	Iodel			
37.75%				
19.70%				
609				
umn 1 Colum	n 2 Column 3	Column 4		_
	GMM-IV	GMM-IV	REG 3	-
DLLEV	REG 2			

#### Table 2: Estimation of our capital struc

Mean of dependent variable

Number of observations

Standard deviation of dependent variable

	Column 1	Column 2	Column 3	Column 4
Estimation method			M-IV	GMM-IV REG 3
Deprendent variable ( $y$ )	DLLE	REC	32	
Independent( $x$ ) variables	Mean			
DLLEVL1	0.1	3%	-0.146	-0.078
DLLEVL4	0.1	5%	[-5.208] 0.047 [1.090]	[-2.581] <b>0.250</b> [5.150]
SDEV	0.1	5%	<i>1.121</i>	-0.852
DLACOT	0.0	8%	[4.579] -0.271	[-22.237] - <b>0.241</b>
DLPRF	-0.3	0%	-[5.972] - <b>0.095</b> [-5.159]	[-4.374] - <b>0.208</b> [-37.469]
DLTAN	0.0	8%	0.104	ີ 0.066
GRW	19.7	9%	[2.567] <b>0.003</b> [2.027]	[4.409] 0.002 [0.974]
DSLS	0.1	1%	-0.288	-0.113
Marginal Impact on Leverage Model fit and diagnostic test statistics		- , -	[-4.574] 1.121	[-1.139] <b>9.938</b>
Wu Hausman (F-statistics)			3.85	3.85
Wu-Hausman- F-statistics (Prob Value)			0.001	0.001
m2 test			0.398	0.327
Wald test			0.001	0.001
Sargan test Adj R <sup>2</sup>			0.87 0.18	0.87 0.67

Note

The estimated coefficients in bold italics are significant at the conventional five percent level 1.

The values are the coefficients and the figures in brackets [...] are the t-statistics unless otherwise stated 2.

The instrumental sets includes the lagged values of all the right-hand side variables dated t = 43.

The m2 tests are for second-order AR (2) serial correlation in the differential residuals equation under the null hypothesis of no serial 4. correlation. The test is asymptotically distributed as N(0, 1).

The formal Wald tests reject the null that the original idiosyncratic errors are serially uncorrelated. These are obtained using Eviews 5. 'view-coefficients test-Wald – coefficients restriction and entering the restriction C(1) = -0.5 in the edit box'.

6. The Sargan test is used to test the over-identifying restriction and is asymptotically distributed as x(p-k) under the null of instrument validity. (k is the number of estimated coefficients and p is the instrumental rank).

The Sargan tests for the three models in column, 2, 4 and 4 are not significantly different from zero. This implies that the null 7. hypothesis that our instrumental variables are valid cannot be rejected at the conventional 5% confidence level.

LLEV	The total leverage ratio. This is calculated as the ratio of total liabilities to total assets
DLLEV <sub>t-1</sub>	Percentage change in the natural logarithm of the total leverage ratio lagged one year, t-1
$DLLEV_{t-2}$	Percentage change in the natural logarithm of the total leverage ratio lagged two years, t-2
$DLLEV_{t-3}$ $DLLEV_{t-4}$ $SDEV$	Percentage change in the natural logarithm of the total leverage ratio lagged three years, t-3 Percentage change in the natural logarithm of the total leverage ratio lagged four years, t-4 The standard deviation of the ratio of earnings before depreciation, interest and tax to total assets. An increase in this variable denotes a worsening in earning volatility (ie, business risk)
$SDEV_{t-1}$	The standard deviation of the ratio of earnings before depreciation, interest and tax to total assets lagged one year, t-1
$SDEV_{t-2}$	The standard deviation of the ratio of earnings before depreciation, interest and tax to total assets lagged two years, t-2
SDEV <sub>t-3</sub>	The standard deviation of the ratio of earnings before depreciation, interest and tax to total assets lagged three years, t-3
$SDEV_{t-4}$ $SDEV^2$	The standard deviation of the ratio of earnings before depreciation, interest and tax to total assets lagged four years, t-4
SDEV	The square of the standard deviation of the ratio of earnings before depreciation, interest and tax to total assets
AGENCY COSTS PROFITABILITY	The ratio of earnings before depreciation, interest and tax (EBDIT) to total assets The ratio of total fixed assets to total assets
PROFITABILIT	Percent change in the natural logarithm of total assets in millions of Nigerian Naira
TANGIBILITY	Natural logarithm of total sales revenue in millions of Nigerian Naira
GROWTH	
SIZE	

#### Table 4: The Definitions Of Variables

Table 5: Pairwise Correlation Matrix For Leverage And Its Dterminants

Variables	Dllev	Sdev	Dacot	Dlprf	Dltan	Grw	Dsls
Sdev	-0.061	1.000					
Dacot	[-1.332] -0.019 [0.414]	[-] 0.077 [1.681]	1.000 [-]				
Dprof	-0.005 [0.103]	0.039 [0.854]	-0.11 [0.245]	1.000 [-]			
Dtan	0.236 [5.254]	-0.013 [0.290]	-0.008 [0.177]	0.039 [0.853]	1.000		
Grw	0.198 [4.375]	-0.076 [1.660]	-0.282 [6.361]	-0.026 [0.556]	0.231 [5.165]	1.000	
Dsls	-0.026 [0.564]	0.060 [1.306]	0.260 [5.825]	0.011 [0.233]	0.030 [0.652]	0.025 [0.550]	1.000 [-]

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# A PRINCIPLES-BASED CASE FOR TEACHING INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

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#### ABSTRACT

IFRS has been widely used around the world with more than 120 countries permit or require IFRS. Although the SEC still requires U.S. firms to follow U.S. generally accepted accounting principles (U.S. GAAP), it has allowed foreign companies to use IFRS for preparing their financial statements without reconciliation to U.S. GAAP since 2007. The Securities Exchange Commission is expected to make an announcement in the near future concerning how to incorporate IFRS into U.S. financial reporting. Consequently, U.S. accounting educators started to teach IFRS by discussing differences between IFRS and U.S. GAAP, and how to apply IFRS from a technical standpoint. However, such approach does not reflect any exercises of professional judgment needed for applying "principles-based" IFRS that requires a much greater extent of professional judgment than "rule-based" U.S. GAAP. In addition, this typical approach does not provide any explanations as to why the International Accounting Standards Board (IASB), a standard setter of IFRS, promulgated specific IFRS accounting treatments. This principlesbased case emphasizes a "why" question by using the IASB Conceptual Framework for Financial Reporting to question and understand the basis for specific differences between IFRS and U.S. GAAP requirements, and to critically examine weaknesses of these requirements. The case discussion involves six accounting topics: fundamental differences between IFRS and U.S. GAAP; inventories; property, plant and equipment; intangibles; impairment of assets; and statement of cash flows. This principlesbased approach should help stimulate classroom discussion, sharpen student critical thinking skill and develop professional judgment among students. Students will be much better served if we not only teach them differences between IFRS and U.S. GAAP and how to technically apply IFRS, but also help them develop an understanding of conceptual basis for the standards. This principles-based case could be used in an intermediate accounting class, and an international accounting course at both undergraduate and graduate levels.

#### **JEL:** M41

KEYWORDS: Conceptual Framework, IFRS, U.S. GAAP, critical thinking, and professional judgment

#### **CASE MATERIALS**

The following six tables describe accounting requirements of IFRS and U.S. GAAP regarding six accounting topics: fundamental differences between these two sets of standards; inventories; property, plant and equipment; intangibles; impairment of assets; and statement of cash flows. Each of these six accounting topics has two to five accounting issues that have major differences between IFRS and U.S. GAAP. For example, Inventories topic has five accounting issues: LIFO, standard cost, lower of cost or market (LCM), cost basis in LCM, and reversal of write-downs.

#### Table 1: Fundamental Differences

IFRS	U.S. GAAP
- More principles-based: Provide a conceptual basis instead of a list of detailed rules, leading to more judgments with greater emphasis on economic substance over form.	<ul> <li>More rules-based: More-detailed bright-line guidance and less judgments result in unintentional emphasis on form over economic substance as in the case of Enron.</li> </ul>
- Conceptual framework is authoritative and has a very high status. IAS 8 requires preparers to use the framework in dealing with topics not yet addressed in any IFRSs or their interpretations.	<ul> <li>Conceptual framework is not authoritative, not used in applying U.S. GAAP, and has a very low status, below industry practices.</li> <li>Preparers mainly rely on FASB's detailed implementation guidance.</li> </ul>
- Has overriding principle of fair presentation. In an extremely rare circumstance when compliance with the requirement of a standard or interpretation would be so misleading, preparers are required to depart from that requirement with extensive note disclosures.	- No such overriding principle is available to preparers of financial statements. Although the overriding principle is available to an auditor via Rule 203 exception of the AICPA's <i>Code of Professional Conduct</i> , Rule 203 exception is rarely invoked in practice.

#### Table 2: Inventories

IFRS (IAS 2)	U.S. GAAP
- Allow FIFO and weighted-average. <b>LIFO is not allowed.</b> Standard cost and retail method are allowed if they approximate cost as defined in IAS 2.	<ul> <li>Allow FIFO, weighted-average, and LIFO. Do not allow standard cost.</li> </ul>
- Reported at the lower of cost or net realizable value (NRV).	- Reported at the lower of cost or replacement cost with a ceiling
- The original cost always remains as the cost basis.	<ul><li>(NRV) and a floor (NRV – normal profit margin)</li><li>The lower market value becomes the new cost basis.</li></ul>
- Write-downs to NRV must be reversed when selling price increases up to the original cost.	- Prohibit a reversal of write-downs to market.

## Table 3: Property, Plant and Equipment (PPE)

IFRS (IAS 16)	U.S. GAAP
- May use either the cost model or the revaluation model to measure a PPE class, e.g., land, machinery, office equipment.	- Require the cost model which is acquisition cost less accumulated depreciation and any accumulated impairment losses.
<ul> <li>Revaluation (fair value) model at initial revaluation: Revaluation increases are credited to equity as a revaluation surplus. Revaluation decreases are recorded as an expense.</li> </ul>	- Prohibit the revaluation model.
- Must keep fair values up to date if a firm uses the revaluation model.	
- Must revalue all assets of the same class at the same time.	
- Each part of an item of PPE with a cost that is significant in relation to the total cost of the item shall be depreciated separately.	- Take a 'holistic view' of PPE depreciation instead of the IFRS 'component' approach.

If FV of land is appreciating and FV of office equipment is depreciating, which framework concepts are relevant for choosing the measurement model for land vs. for office equipment? Explain.

#### Table 4: Intangibles with a Limited Useful Life

IFRS (IAS 38)	U.S. GAAP
<ul> <li>Carry at cost less accumulated amortization (benchmark) or fair value (allowed alternative – only for intangibles with an active secondary market).</li> </ul>	- Carry at cost less accumulated amortization. Prohibit fair value.
- Research expenditures must be expensed as incurred. Development expenditures must be recognized as an intangible asset when meeting <u>all six</u> specific criteria about intention, financial ability, technical feasibility and commercial feasibility.	- Research and development expenditures must be expensed as incurred with an exception of computer software's development costs which may be recognized as an asset.
- If <u>in</u> distinguishable, all R & D must be classified as research expenditures and expensed as incurred.	

Table 5: Impairment of Assets (PPE, intangibles, investment in subsidiaries, associates and joint ventures)

IFRS (IAS 36)	U.S. GAAP
- An asset is impaired when its carrying amount (book value) exceeds its recoverable amount which is the greater of net selling price or value in use.	<ul> <li>An asset is impaired when its carrying amount exceeds its future cash flows (undiscounted) expected to arise from its continued use and disposal.</li> </ul>
- Value in use is the present value of future net cash flows expected to arise from continued use of the asset and upon its disposal.	- Net selling price is not involved and future cash flows are not discounted to their present value.
- Impairment loss is the excess of carrying amount over its recoverable amount.	- Impairment loss is the excess of carrying amount over its fair value.
- Reversal of impairment loss is required in certain situations, except for goodwill.	- Prohibit the reversal of a previously recognized impairment loss.
- Goodwill is tested for impairment at either the cash-generating unit (CGU) or group of CGUs which cannot be larger than a segment.	- Goodwill is tested for impairment at the reporting unit level which may be higher than CGU.

#### Table 6: Statement of Cash Flows

IFRS (IAS 7)	U.S. GAAP
- When using the indirect method, the reconciliation from income to operating cash flows may begin with any measure of income.	- When using the indirect method, the reconciliation from income to operating cash flows must begin with net income.
<ul> <li>When using the direct method, the reconciliation of income to operating cash flows is not required.</li> <li>Bank overdrafts may be included as a reduction in cash equivalents.</li> <li>Dividends paid may be classified as an operating or a financing activity.</li> </ul>	<ul> <li>When using the direct method, an entity must also present a reconciliation of income to operating cash flows.</li> <li>Bank overdrafts are to be classified as a financing activity.</li> <li>Dividends paid must be classified as a financing activity.</li> </ul>
<ul> <li>Dividend received and interest received may be classified as an operating or investing activity. Interest paid may be classified as an operating or financing activity.</li> </ul>	<ul> <li>Dividend received and interest received or paid must be classified as an operating activity.</li> </ul>

#### CASE REQUIREMENTS

Per the conceptual framework specified in IASB (2010) and FASB (2010), the objective of financial reporting is to provide financial information about a reporting entity that is useful to existing and potential investors in making decisions about providing resources to the entity. Investors need information useful

for assessing: (1) the amount, timing and uncertainty of future net cash inflows to an entity, and (2) how well management discharges its responsibilities. For each accounting issues under each of the six accounting topics above, use the conceptual framework (available at http://www.ifrs.org/IFRSs/IFRS.htm) to discuss:

- 1. Qualitative characteristics of useful financial information that are the underlying principles of IFRS requirements and U.S. GAAP requirements.
- 2. Weaknesses of IFRS and U.S. GAAP requirements in term of these qualitative characteristics. Your discussion of these framework concepts should include:
  - a. Specific fundamental characteristic(s) along with its element(s) that contribute to decision usefulness in assessing cash flow prospects and management discharge of its responsibilities.
  - b. Specific enhancing characteristic(s) contributing to the decision usefulness.
  - c. Cost constraint, i.e., costs should be lower than benefits.

Articles by Barth (2008) and Nobes (2005) provide good examples for how to use framework concepts to identify underlying principles and weaknesses of IFRS and U.S. GAAP. Please keep in mind that the following justifications are NOT acceptable.

- 1. The requirement leads to better financial performance, e.g., higher earnings or assets. Such justification is for companies like Enron, WorldCom or Parmalat.
- 2. Better matching of expenses with revenue: Matching principle is not part of the conceptual framework. Income (expense) is recognized when an increase (a decrease) in future economic benefits related to an increase (a decrease) in an asset or a decrease (increase) in liability has arisen that can be measured reliably (IASB 2010).
- 3. More conservative treatment: Conservatism is not part of the conceptual framework because it contradicts with neutrality element of faithful representation.

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## ABSTRACT

Against the background of the recognized fact that one of the objectives of Nigeria National Housing policy of 1991 was to ensure that all Nigerians own or have access to decent housing accommodation at affordable cost by the year 2000, this paper presents the 'Time Dimensional Analysis of Public-private sector involvement in Housing Finance in Nigeria' using detailed Literature review from relevant books and journal as well as personal observation. The achievements and failures of both the public and private sectors housing programs were analyzed and the paper found out that housing cost is still on the high side as Public housing finance in Nigeria did not yield much result and that housing affordability is still a mirage by the masses as housing finance has been left at the doorsteps of the private sector. The paper concludes by suggesting full involvement of the public sector in the provision of housing finance in Nigeria among others in order to make housing accessible by all.

KEYWORDS: Public sector, Private sector, Housing cost, Housing finance and Housing Affordability.

# INTRODUCTION

Housing is one of the three basic necessities of human being and the most important requirement for the physical survival of man after food. It is one of the best indicators of a person's standard of living and his place in the society. Housing either in unit or multiple forms is a significant component of the physical form and the structure of the community. In other words, housing covers all socially accepted ways by which man acquires a territory, and the procedures by which he retains that territory. Also, the price paid for it and the manner in which the stock of the houses are maintained and enlarged (Aribigbola, 2000). However, in the developing countries today, the problem of Housing has become an everyday discussion in all quarters of the public and private services. It has become increasingly glaring that most of the urban population live in dehumanizing housing environment while those who have access to average housing do so at abnormal cost (Dosumu, 2002). In Nigeria, for example, housing problem is essentially an urban problem . Most authors have analyzed this from various perspectives, with most of them giving it a quantitative pre-eminence (Agbola, 2001; Agbola et al, 1992 and Onibokun, 1985). Also, they have, at different times revealed the problems associated with production. Agbola (1987) for example, recognized finance as part of housing problems but ranked land and building materials higher. Finance in this context refers to the capital provided for the construction of a dwelling; and as such, money provided to cover cost of acquiring land, procurement of building materials and labour cost (Bello, 2002).

Therefore, Agbola's submission on housing finance led to intensive research in these areas and the findings influenced government housing policies. Also, this led to the subsequent establishment of some relevant programs and Institutions like the Site and Service program as well as the National Institute for Road and Building Research meant to undertake research in the areas of housing. The drought of information and working knowledge of Housing finance operation is a major problem today in the country while Housing problems still persist and hosing cost continue to be on the high side. Thus, in view of the high costs of erecting a house, a potential house owner has to either depend on his savings or borrow part or the entire cost of the project from the private sector. It is against this background therefore, that the paper examines the Time dimensional analysis of Public-Private housing finance in Nigeria. It identifies the achievements and failures of both and at the end, made recommendations towards solving housing problem in Nigeria.

#### METHODOLOGY

The descriptive research method was used for the study. The study area is Nigeria, located in the Western part of Africa consisting of black races. The country was purposely selected for the study because it is a developing country struggling to achieve housing sustainability. Data was collected from both secondary sources and personal observations.

#### Public Housing Finance In Nigeria

According to Arilese (1997); Okupe et al (2000) and Agbola (2001), the provision of Housing finance in Nigeria by the Public sector could be traced to the colonial days. During this period, the finance of housing was provided and limited to the expatriate staff and few selected indigenous senior servants working with the colonial masters in the urban centers. Further contribution was made in 1928 to curb the bubonic plague that erupted in Lagos and this led to the establishment of Lagos Executive Development Board . Also, the Nigerian Building Society (1956), formation of Housing Corporations between 1956 and 1960, National Council for Housing (1971) and Federal Mortgage Bank of Nigeria (1977). The Federal Mortgage Bank of Nigeria took off with a capital of  $\mathbb{N}20$ million which was later increased to  $\mathbb{N}150$ million in 1976 as well as Commercial Banks, Insurance Companies and Merchant Banks.

Prior to the formation of the National Housing Policy of 1991, the Federal Government of Nigeria interfered in the provision of Housing for Nigerians. This was done through National Development Plans (Federal Ministry of Work and Housing, 1991). First (1960-68), Second (1970-75), Third (1976-1980) and Fourth (1980-85). However, the most significant government intervention was during the third National Development Plan of 1976-1980 when the Federal Government participated directly and actively in the provision of Housing rather than leaving it to the private sector. Thus, a total sum of N2.6 Billion was allocated for the implementation of the Programme. (Federal Ministry of Economic Planning, 1975 and Federal Republic of Nigeria, 1981). The National Housing Policy of 1991 on its own explicitly spelt out the role of financial institutions in the provision of housing (Federal Mortgage of Nigeria, 1998; Federal Republic of Nigeria, 1998; Federal Republic of Nigeria, 1998; Federal Republic of Nigeria, 1998; the institutional housing finance system is still not well developed and equipped to mobilize and channel savings to the housing sector.

#### Achievements And Failures Of National Development Plans

The high hopes, noble pledges, huge sums of money and goodwill which welcomed the various public intervention program were not sufficient to prevent their failure. For example in the third plan, out of the anticipated 202,000 housing units, only about 20,950 units were actually completed, a success rate of only 13.3 percent. So colossal was the failure of each successive public housing programs that experts spared no pains at advancing reasons for their poor performance despite the fact that housing needs were estimated (Tables 1 and 2)' which include the excessive and unnecessary delays in the planning, execution and construction of housing project which invariably add to housing costs, speculation and subsequently limit the number of units that can be built with the same capital; there is also the disregard for alternative avenues of housing provision other than direct construction. Site and services, core housing and the like were part of the explicitly stated housing policy objectives of the third and the fourth plans, only a handful of states experimented with them. Even where those houses were built, evidences abound to show that many remain inhabitable and thus unoccupied. The target population, taste and preferences were not articulated in the first instance before the standard; almost stereotype designs that have no relation to the immediate cultural environment were adopted. These amongst other reasons account for the colossal failure of public housing in Nigeria. It is not surprising, therefore, that the contribution of the public sector to the total stock of housing is only about the quarter. The implication of this is that Nigeria

cannot rely on the conventional methods (direct housing construction) to supply the people of this country with decent housing.

Table 1: Estimated Housing needs Nigeria (1999 – 2001)

	Urban areas	Rural areas	Total
Housing stock 1991 ('000 units)	3,373	11,848	15,221
Estimate no of households 2001	7,289	15,295	22,584
Required output 1991 – 2001 ('000)	3,916	3,447	7,363
Required annual output, 1991 - 2000	1391.6	344.7	736.3

Source: UN – HABITAT, 2002. Table showing the Estimated Housing Needs of Nigeria between 1999 and 2001

Table 2: Estimated Housing Stock, by dwelling types in Nigeria (1991).

	Urban	Urban	Rural	Rural	Total	Total
	%	Units	%	Units	%	Units
Maisonnette	2	67	0	12	1	79
Duplex	3	101	0	-	1	101
Detached Bungalow	10	337	20	2289	17	2,627
Semi – detached	12	67	1	60	1	127
Flat	15	506	0	-	3	506
Room	65	2,194	77	9,200	74	11,393
Others	3	101	2	287	3	388
Total	100	3,375	100	11,848	100	15,221

Source: UN - HABITAT, 2002. Table showing the Estimated Housing Stock by dwelling types in Nigeria

#### Private Housing Finance In Nigeria

The private sector has been taking active part in the provision of housing. According to Olotuah (2005), the private sector is the major supplier of Housing in Nigeria. The organized private sector in most cases supplies the middle and upper income groups and does little in meeting the housing needs of the poor because the profits that can be made from low- income housing are relatively small. Such Private sectors include Commercial banks like the United Bank for Africa and the Union Bank, Nigeria. Insurance companies like British American insurance Company PLC, Money lenders, Cooperative societies, large scale Departmental stores, trading organizations like United African Company, SCOA etc. In Nigeria, only very few with strong financial base engage in housing provision .The major players in the private sector partnership are G. Cappa, Taylor Woodrow, Julius Berger and some indigenous contracting outfits. Recently, some large scale estate developers e.g. Aima Beach developers joined them.

The private sector is faced with a lot of difficulties in housing (Olotuah, 1997) which hampers its performance. The poor quality of housing provided by the private sector (in particular the popular sector) is symptomatic of these hurdles. Some of these are difficulties in obtaining planning and building permissions, lack of access to urban services and infrastructure as well as inadequate finance. In order for private sector to operate optimally, these bottlenecks have to be removed decisively. Also, improvement in the economic climate of the country is imperative for greater private sector involvement in Housing. However, the Private housing finance system is characterized with high interest rates compared to the Public housing finance system while there is also the problem of short period of loan repayment. The advantage of usage include easy accessibility to finance, regular availability and the amount of finance that has no relationship with income

## Sustainability In Housing Provision In Nigeria

The general goal of Sustainable development is to meet the essential needs of the world's poor while ensuring that future generations have an adequate resource base to meet theirs. It is thus geared towards meeting the needs of the present generation without compromising the ability of future ones to meet their own needs (WCED, 1987). Achieving sustainability in Housing requires major societal changes,

restructuring of institutions and management approaches. It requires the appropriate political will based on the conviction of responsibility of government to its citizens and the need to create a humane and decent environment for dignified living. In order to realize sustainable housing provision, the housing needs of the Nigerian population have to be put into proper focus and a coordinated program to achieve this should be thoroughly worked out. Sustainable housing provision is thus contingent on a number of underlying factors. These are Policy formulation and decision making, Policy execution and monitoring and social acceptability and economic feasibility. Also, the task of providing adequate and affordable housing for the urban poor could be tackled by the increased use of alternative building materials such as laterite bricks/ stabilized bricks, cement- fibre roofing materials and bamboo.

These materials have been shown to have lower cost advantages over conventional building materials. The efforts of the Nigerian Building and Road Research Institute (NBRRI) and some local companies in Nigeria have yielded suitable equipment such as VS Cinva ram press, a multipurpose brick making equipment as well as interlocking brick press and should be encouraged. The lack of willpower and general acceptance has been the bane of the use of alternative building materials in Nigeria. Government could set the right examples by building prototype houses using indigenous approach for mass housing schemes

## CONCLUSION

This paper has shown that there is problem with Housing in Nigeria. The cost of Housing is on the high side as the provision of finance is largely on the side of the private sector. Therefore, government should take active part in order to increase the housing stock in the country as well as making housing a reality for all in order to achieve Sustainable development.

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## CORPORATE PHILANTHROPIC DISASTER RESPONSE AND REGIONAL ECONOMIC DEVELOPMENT: EVIDENCE FROM CHINA

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## ABSTRACT

This paper examines whether the likelihood, speed, and amount of firm charitable giving in response to catastrophic events are related to the regional economic development that the donating firm located. Based on the data of Chinese firms' response to the 2008 Sichuan earthquake, we find that the extent of corporate contributions for firms in more developed areas following this disaster is more than that for firms in less developed areas. Firms in more developed areas are also more likely and more quickly to respond in this disaster. We contribute this to the more competitive environment that firms in more developed areas face and firms view catastrophic donation as a differentiation strategy. This study thus provides evidence suggesting that even in the wake of catastrophic events, corporate philanthropic giving is strategic. The results also reveal that firm size, profitability, geography, cash resource available, leverage, and ownership type affect firms' philanthropic disaster response behavior in the largest emerging market, China.

## **JEL:** G11; G12

**KEYWORDS**: catastrophic events, corporate philanthropy, corporate social responsibility, regional economic development

## INTRODUCTION

Recent catastrophic events, such as the 9/11 New York terrorist attacks in 2001, the South Asian tsunami in December 2004, Hurricane Katrina in the southern U.S. in August 2005, the Kashmiri earthquake in October 2005, and China's Sichuan earthquake in May 2008 were all devastating and spurred philanthropic actions by individuals, corporations, nongovernmental organizations, and government agencies. In particular, many companies responded by giving donations (e.g., cash, goods, and employee voluntary efforts) as part of their corporate social responsibility (CSR). Carroll (1979) argues that CSR has four intimately related facets — economic, legal, ethical, and philanthropic — with organizations striving to achieve all four simultaneously. On the bases of these components, a socially responsible firm "should strive to make a profit, obey the law, be ethical, and be a good corporate citizen" (Carroll, 1991, p. 43).

The present research focuses on one special class of CSR — corporate philanthropic disaster response (CPDR). Although corporate philanthropic response is not enforced as are economic and legal responsibilities, it is increasingly practiced by companies and is generally viewed as a sign of good corporate citizenship. Previous research (e.g., Chapple and Moon, 2005; Katz et al., 2001; Kolk, 2005; Muller and Whiteman, 2009; Shen, 2004; Welford, 2005; Zhang et al., 2010) suggests that companies worldwide react and respond differently to natural disasters, and their philanthropic donations can be motivated by a variety of factors, including cultural, institutional (e.g., stakeholder configurations), organizational, economic, and geographic. The motivation for corporate giving is not inherently altruistic. Corporate giving is a reaction to seismic shifts in the environmental landscape, and it represents a reactive strategy crafted to counter pressures such as stakeholder demands, threats of government intrusion into industry's freedom, and escalating public expectations (Campbell et al, 1999; Gardberg and Fombrun, 2006; Patten, 2008). In today's global business, CPDR is becoming more strategic, as has been indicated

by Brammer and Millington (2006), Saiia (2002), and Sánchez (2000). Ever-increasing global competition requires that firms establish their competitive advantage from various sources. Corporate philanthropy may help a firm establish reputation, brand recognition, and loyalty; promote itself as a "socially responsible" firm; or attract and maintain a work force (Sánchez, 2000). Dean (2003) finds that corporate donations can help the company forge a relationship with the customer and build loyalty. As in more marketized regions, firms are less affected by government intervention and have better operational environments, such as more developed factor market, and better legal environment, these firms are more market-oriented and have high awareness of market competition. Thus, we predict that firms located in more developed areas and face a more competitive market will tend to have higher likelihood of giving, to donate more quickly, and to donate larger amounts.

We posit that firms located in more developed areas are more strategically motivated and have more incentives to engage in CPDR than firms in less developed areas. We identified 703 Chinese listed firms that engaged in CPDR through outright cash donations and/or in-kind donations with the value released by the donor firm in May and June 2008. We find that the likelihood, speed, and extent of corporate contributions are positively related to firms' regional marketization index. Furthermore, the decision to engage in CPDR and the amount of donations are positively associated with firm size, profitability, and cash available. Private firms are more likely to donate and donate more than state-owned firms. The decision to engage in CPDR is negatively correlated with firm leverage. Overall, our results suggest that CPDR decisions and the extent of donations are significantly influenced by firm's ownership type, substantially motivated by strategic drivers, and greatly constricted by economic considerations in emerging markets such as China. This study contributes to the literature in several ways.

First, using a unique research setting provided by the Sichuan earthquake, we investigate the link between CPDR and regional development. To the best of our knowledge, this is the first empirical study explicitly addressing such an association. This investigation is important as Muller and Whiteman(2009) suggest that future research may wish to explore the contours of regional corporate citizenship' in more depth and to further examine the interplay between geography and institutions that may drive CPDR and other corporate citizenship behaviors. Second, we provide evidence of positive association between regional development and CPDR likelihood and amount. These findings are consistent with previous research in that CSR activities are driven by strategic motivation and constrained by economic considerations. Our results add to our understanding of the motivations behind CPDR and carry important implications for practice. We also find a positive relation between regional development and CPDR speed. To our best knowledge, this is the first study to directly examine how firms' characteristics affect their donation speed. Third, we contribute to the literature on sustainability, performance, and CSR by investigating the association between corporate philanthropy (donations) and firm characteristics. Finally, while the issue of CPDR has attracted growing research interest in recent years, most empirical results are based on U.S. data, and this paper is one of the few empirical studies in emerging markets using a large research sample. This article adds to a growing number of non-U.S. studies by investigating the link between firm regional economic development and CPDR in China, the largest developing economy in the world.

The remainder of this article is organized as follows: the second section provides institutional background, the literature review, and research questions. The third section discusses data collection and methods. The fourth section presents the results, and the last section concludes, suggesting implications of the study.

#### Hypotheses Development

There are extant literature examines the role of political and economic institutions on firm behavior, such as financing behavior and long-run performance (Faccio, 2006; Leuz and Oberholzer-Gee, 2006), financial reporting (Ball et al., 2000; Bushman et al., 2004), and auditor choice (Wang et al., 2008). The literature on CSR suggests that firms' CSR activities vary in different countries and are influenced by institutional environments (Chapple and Moon, 2005; Maignan and Ralston, 2002; Muller and Whiteman,

2009; Schlegelmilch and Robertson, 1995; Shen, 2004; Welford, 2005; Wokutch, 1990). For example, Maignan and Ralston(2002) find that companies in France, the Netherlands, the U.K., and the U.S hold substantially different perspectives on: (1) how important it is to be publicly perceived as socially responsible; (2) which CSR issues are more important to emphasize. Their results show that businesses in the four countries do not display the same eagerness to appear as social responsible and employ diverse means to convey social responsibility images. Comparing corporate sponsorship of charitable causes and non-profit organizations between Asia (Japan and Korea) and European countries (France, Germany, Italy, the Netherlands, the U. K.), Shen (2004) suggests that differences between the two regions that are rooted in differences in societal pressure and expectations. Further, an exploratory study of companies in countries in Europe, North America and Asia indicates that there is a link between the development of CSR and the economic development of countries (Welford, 2005). Welford (2005) also finds that many CSR polices are based on localized issues and cultural traditions at a country level.

As a special class of CSR, CPDR activities also vary across countries and institutional environments. Using the sample of Fortune Global 500 firms from North America, Europe and Asia, Muller and Whiteman (2009) explore the role of global variations in institutional contexts as sources of differences in patterns, frequency, and elements of CPDR. They find that corporate giving appears to vary systematically across regions, and there are 'home region effect' and 'local presence effect' in CPDR.

The literature indicates that firms' CSR activities in different regions are related to differences in stakeholder configurations and expectations (Brammer and Millington, 2004; Muller and Whiteman, 2009), culture (Katz et al., 2001; Waldman et al., 2006), managerial values (Chapple and Moon, 2005; Logsdon et al., 2006; Schlegelmilch and Robertson, 1995), and governance structures (Navarro, 1988; Useem, 1988). Muller and Whiteman (2009), for instance, argue that companies that are embedded in similar networks and stakeholders configurations will tend to exhibit similarities in giving behavior, while differences will emerge across companies embedded in different types of networks and stakeholder configurations. Waldman et al. (2006) show that culture can have discernable differences in managerial perceptions and CSR activities. Maignan and Ralston (2002) also demonstrate that managers from the U.S. and the U.K. have different perspectives on the importance of CSR. Besides, governance structures, such as tax policy and capital market development, could also affect firms' willingness and capacity to engage in CPDR (Muller and Whiteman, 2009; Navarro, 1988).

Fiscal decentralization from central to local governments since 1978 has created great heterogeneity in market and institutional quality across provinces in China (Qian and Xu, 1993; Huang, 1996; Qian and Weingast, 1997; Jin et al., 2005; Wang et al., 2008). In less marketized regions, government leaders have more incentive to influence firms to pursue political objectives, such as enhance the government leaders' political capital and increasing their chances for promotion. (Li and Zhou, 2005; Wang et al., 2008) While in more marketized regions, firms are less affected by government intervention and have better operational environments, such as more developed factor market, and better legal environment. These firms are more market-oriented and have high awareness of market competition.

McWilliams and Siegel (2001) suggest that companies can also adopt CSR as a differentiation strategy because CSR helps a firm to build its reputation as being reliable and honest. Indeed, studies show that consumers assume the products of a reliable and honest firm will be of high quality (Brammer and Millington, 2005; Fisman et al., 2006). A survey of 463 U.S. companies found that companies taking a more businesslike approach to charity reported a better image, increased employee loyalty, and improved customer ties (Schwartz and Smart, 1995). Another survey by Walker Information Inc., a research and consulting company that tracks customer satisfaction and business ethics, found that 47 percent of consumers would be more likely to buy from a "good" company that was socially responsible (Sato, 1998). Prior literature has documented the relationship between advertising and provision of CSR. Navarro (1988) concludes that firms that spend more on advertising tend to give more to charity.

McWilliams and Siegel (2000) find that advertising is an element of a differentiation strategy, and it is positively correlated with corporate social performance. Fisman et al. (2006) find that CSR is more

prevalent in advertising-intensive (consumer-oriented) industries. Brown et al. (2006) support the theory that charitable giving enhances shareholder value, and within an industry, advertising intensity is positively related to companies' giving. As a special class of CSR, CPDR is also similar to other classes of CSR. For example, Crampton and Patten (2008) find that CPDR is constrained by similar economic concerns. We posit that firms view CPDR strategically, and firms with more market investments are more likely to give and give more in response to the Sichuan earthquake. Thus, a firm in a more developed area should have more incentives to use CSR to differentiate itself from its competitors. Accordingly, we propose the following hypothesis:

H1: There is a positive relation between CPDR and the economic development of the area that the donating firm located in.

#### Research Design

*Sample:* This paper focuses on the Chinese A-share companies contributed to the relief effort following the May 12<sup>th</sup> Sichuan earthquake. Our research on donation is based on firm self-reporting, which is consistent with previous literature (e.g., Muller and Whiteman, 2009). We hand collected data on the donation amount and the donation date from the official information disclosure website appointed by the China Securities Regulatory Commission (CSRC), companies' websites and press releases. We also systematically search information via Lexis Nexis China and Google China News (The official disclosure website for Chinese listed firms is www.cninfo.com.cn). Similar to Patten (2008), we conducted our search within a period of one month, from May 12<sup>th</sup> 2008 to June 12<sup>th</sup> 2008, as the requirement for a dated press release allows for identification of when the market knew the companies' intent to donate. In total, we identified 703 companies, about 47% of the total number of A-share companies. We measured corporate contributions as outright cash donations plus in-kind donations. The announced contributions for the donation firms ranged from 8,000 Yuan to 60,210,000 Yuan with a mean (median) of 3,086,688 (1,001,000) Yuan.

We include only firms that have no missing financial data. We also winsorize the continuous variables at the top 1% and bottom 99% to alleviate outlier problems. Our final sample includes 1,454 companies, with 670 donators and 784 non-donators. For the subsample of donation speed, we finally have 490 companies issued a dated press release announcing the donation amount from May 12<sup>th</sup> 2008 to June 12<sup>th</sup> 2008. Donation speed is defined as the time distance between the donation date and the earthquake date (May 12, 2008), and the average donation speed for the subsample is 7.13 days.

Our data on the extent of institutional development across regions in China comes from the National Economic Research Institute's marketization index (Fan et al., 2010, see Appendix A for a detailed description). The index captures the following aspects of regional market development: (1)relationship between government and markets, (2)development of non-state sector in the economy, (3)development of product markets, (4)development of factor markets, (5)development of market intermediaries and legal environment. Higher scores of the index suggest greater institutional development. This index has been widely used in the literature to measure regional institutional development. (e.g., Wang et al. (2008), Firth et al. (2009), and Li et al. (2009)) Specifically, we use the marketization index for the headquarters region of the listed firms. Table 1 shows the descriptive statistics of our sample and also the comparison of those characteristics for firms located in more marketized regions and less marketized regions with two-sample Wilcoxon rank-sum tests for differences across the two sub-samples. We find that companies located in more marketized regions are more likely to donate and donate more, which is consistent with our prediction. We also notice that, compared with companies located in less marketized regions, companies in more marketized regions have more cash in hand, and are more profitable.

### Table 1: Descriptive statistics

	Mean	SD	Market Dummy=1	Market Dummy =0	t-test for the difference between observations in the Market Dummy=1 and the Market Dummy=0 groups
1. Donation dummy	0.461	0.499	0.527	0.400	4.90***
2. Donation	6.453	7.052	7.350	5.634	4.67***
3. Cash	19.203	1.583	19.495	18.936	6.86***
4. ROA	0.045	0.080	0.050	0.040	2.55**
5. Size	21.421	1.191	21.510	21.340	2.71***
6. Leverage	0.550	0.373	0.538	0.561	-1.15
Ν			760	694	

Variable Definitions: Market: the index, constructed by Fan et al. (2010), measures the development of market at the provincial level for year 2007. Market dummy: a dummy variable that takes the value of 1 if the firm is located in province where the score of market index is above the median and 0 otherwise. Donation dummy: a dummy variable that takes the value of 1 if the firm contributes to earthquake relief and 0 otherwise. Donation: log form of total amount of cash and in-kind donation of firms. Cash: log form of total amount of cash and in-kind donation of firms. Cash: log form of total amount of cash and cash equivalents in the 2007 annual report. Size: log form of total assets in the 2007 annual report. Leverage: total debt divided by total assets in the 2007 annual report.

Before considering a multivariate analysis, it is useful to examine the univariate relation between dependent variables and various independent variables. Table 2 presents Pearson correlations results. As expected, the donation dummy, measuring whether the firm contributes to earthquake relief, is positively correlated with market. The variable donation, including both cash and in-kind donations, is significantly positive with the marketization index. These results are consistent with the hypothesis that firms located in more marketized regions are more likely to donate and donate more.

In line with prior literature (e.g. Crampton and Patten, 2008; Useem, 1988; Zhang et al., 2010), the donation dummy and donation are positively related with Cash and ROA, suggesting that donation is constricted by economic concerns. We observe a positive correlation between donation dummy (donation) and size, which is consistent with the assertion that large firms are more visible to the public and they may have more incentives to donate to increase firm reputation (Brammer and Millington, 2006). Leverage is significantly negative with donation dummy and donation, indicating firms with more leverage are less likely to donate and donate less after the catastrophic event. Consistent with findings in table 1, we also find that the marketization index is positively correlated with size, ROA, and Cash.

	1	2	3	4	5	6
1. Donation dummy	1					
2. Donation	0.990***	1				
3. Cash	0.270***	0.310***	1			
4. ROA	0.102***	0.116***	0.122***	1		
5. Size	0.203***	0.256***	0.783***	0.043	1	
6. Leverage	-0.103***	-0.101***	-0.294***	-0.121***	-0.101***	1
7. Market	0.106***	0.102***	0.174***	0.081***	0.071***	-0.020

Table 2: Variable correlations

## **EMPIRICAL RESULTS**

We then use logistic regression models to examine whether firms located in more marketized regions are more likely to involve in CPDR. Donation dummy was used as the dependent variable to capture the likelihood of firms to make donation. We use two variables, market and market dummy, to measure the level of marketization. Similar to existing literature (Adams and Hardwick, 1998; Amoto and Amoto, 2007; Brammer and Millington, 2006; Zhang et al., 2010), we also include size, ROA, cash available, leverage and industry as our control variables.

 $DonationDummy_{ii} = \alpha_0 + \alpha_1 Market(MarketDummy)_{i-1} + \alpha_2 Cash_{ii-1} + \alpha_3 ROA_{ii-1} + \alpha_4 Size_{ii-1} + \alpha_5 Leverage_{ii-1} + Industries + \varepsilon_{ii}$ (1)

In Table 3, we present results for the equation (1). In both regressions, the coefficients of market or market dummy are positively significant (*p*-value < 0.05). These results are consistent with the first hypothesis that firms located in more marketized regions are more likely to donate in response to catastrophic events. The coefficients of size and cash are positively significant. These results confirm the findings of researchers such as Crampton and Patten (2008) and Seifert et al. (2003) that profitable firms and firms with more cash resources available are more likely to involve in CPDR activities. The coefficients of Size and negative respectively, but not significant in either of the two models.

	Reg1		Reg2	
Model explanatory power			<u> </u>	
Number of observations	1454		1454	
Pseudo $R^2$	0.080		0.083	
Wald Chi <sup>2</sup>	123.98		131.14	
Significance of Wald Chi <sup>2</sup>	0.000		0.000	
Parameter estimates				
Variables	Parameter estimate	z-statistic	Parameter estimate	z-statistic
Intercept	-9.448***	7.968	-8.978***	7.770
Market	0.073**	2.536		
Market dummy			0.406***	3.478
Cash	0.331***	4.521	0.323***	4.413
ROA	1.982**	2.364	1.995**	2.363
Size	0.084	0.947	0.090	1.028
Lev	-0.287	1.228	-0.285	1.234
Industries	Controlled		Controlled	

Table 3: Logistic regression results for tests of the relation between the likelihood of firm donation and marketization level

We also apply Cox (1972) proportional hazards model to test the effect of institutional development on the probability of donation conditional on time. The advantage of Cox model is that we do not need to make a priori assumptions regarding the distribution of terminal events in a study population, while the dependent variable is longitudinal and the phenomenon of interest is a discrete event. In our regression sample, the dependent time variable is the durations of donation from the earthquake date (May 12, 2008) to the donation date and each observation will be marked by "failure" if firm donates. A positive coefficient for independent variable  $x_i$  suggests that firm i is more likely to donate within a certain period (31 days in our sample) influenced by this factor (The regression results of Cox model imply that in a model with variable xi, coefficient  $\alpha_i$  is the increase in the log hazard ratio for a one-unit increase in variable xi, holding the values of other variables constant. Furthermore, for variables with hazard ratios less than 1 ( $\alpha_i < 0$ ), increasing values of the variables are associated with lower risk and longer survival times). We also control cash resources available, firm profitability, firm size, leverage, and industries in the model.

$$DonationSpeed_{it} = \alpha_0 + \alpha_1 Market(MarketDummy)_{t-1} + \alpha_2 Cash_{it-1} + \alpha_3 ROA_{it-1} + \alpha_4 Size_{it-1} + \alpha_5 Leverage_{it-1} + Industries + \varepsilon_{it}$$
(2)

The results including both coefficients and hazard ratio are show in Table 4. For variable market, the positive coefficient is found to be significant at the 10% in the model, which suggests that that firms that are located in more marketized regions increase the likelihood of donation within 31 days. Similar to model 1, market dummy also has a positive coefficient (significant at 5% level) and a hazard ratio bigger than 1, supporting our second hypothesis.

The coefficients of both the cash and ROA are significantly positive with correspondingly high magnitudes of the hazard ratios, suggesting that higher profitability and more cash resources increase the likelihood of donation. Leverage is the only variable whose coefficient is significantly negative and has a hazard ratio less than 1. Firms with more debt have more pressure to pay off their debt thus decrease the likelihood of donation. This finding is consistent with argument of Adams and Hardwick (1998) and Brammer and Millington (2005).

Table 4: Cox proportional hazards model for tests of the relation between donation speed and marketization level

		Reg1			Reg2		
Model explanatory power Number of observations Likelihood Ratio		1277 216.262			1277 219.215		
Parameter estimates Variables	Parameter estimate	Chi- Square	Hazard ratio	Parameter estimate	Chi- Square	Hazard ratio	
Market Market dummy	0.042*	3.294	1.043	0.237**	6.252	1.268	
Cash	0.364***	32.446	1.439	0.358***	31.120	1.430	
ROA	1.562***	7.913	4.766	1.572***	8.080	4.818	
Size	0.094	1.720	1.099	0.102	1.980	1.107	
Lev	-0.427*	3.734	0.652	-0.428*	3.757	0.652	
Industry effects		Controlled			Controlled		

To further explore the effect of institutional environment on CPDR, we estimate ordinary least squares (OLS) regressions to test the relation between the marketization index and donation amount. Similar to equation (1), we control effects of size, profitability, leverage and industry.

$$Donation_{it} = \alpha_0 + \alpha_1 Market (Market Dummy)_{t-1} + \alpha_2 Cash_{it-1} + \alpha_3 ROA_{it-1} + \alpha_4 Size_{it-1} + \alpha_5 Leverage_{it-1} + Industries + \varepsilon_{it}$$
(3)

Table 5: Multiple regression results for tests of the relation between the amount of charitable contribution and marketization level

	Reg1		Reg2	
Model explanatory power Number of observations Adjusted $R^2$ <i>F</i> -statistic	1454 0.1173 16.23		1454 0.1201 16.99	
Significance of <i>F</i> -statistic Parameter estimates Variables Intercept Market	0.000 Parameter estimate -29.235*** 0.206**	<i>t</i> -statistic 8.439 2.299	0.000 Parameter estimate -27.855***	<i>t</i> -statistic 8.255
Market dummy Cash ROA	0.971*** 7.216***	5.375 3.464	1.162*** 0.944*** 7.259***	3.143 5.246 3.475
Size Lev	0.623** -0.281	2.536 0.662	0.643*** -0.273	2.628 0.648
Industries	Controlle	d	Controlle	d

Results of estimation of equation (3) are reported in Table 5. Market and market dummy are positively related to firm donation amount, with p-value at the 0.05 level and the 0.01 level, respectively. The regression results suggest that, after controlling for various factors that affect donation amount, firms located in more marketized regions donate more than firms located in less marketized regions. Thus hypothesis 3 is supported.Consistent with results in table 2, firm size is positively related to the total

donation amounts of firms. Firm profitability and cash resources available are positively correlated with firm donation amount, supporting Crampton and Patten (2008)'s argument that even in the in the wake of catastrophic events, corporate philanthropic giving is constrained by economic concerns. Leverage is not significant in regression models.

#### **DISCUSSION AND CONCLUSION**

The present study investigates the relationship between CPDR and regional economic development. Using data on Chinese firms' philanthropic response to the 2008 Sichuan earthquake, we find that the probability, speed, and amount of charitable giving are positively associated with the marketization index of firms' location. The findings are consistent with the strategic view of CPDR, in that managers use philanthropic giving as part of the firm's strategy. Firms are not purely altruistic when making philanthropic donations. Instead firms utilize CPDR as a marketing strategy to differentiate themselves from their competitors with higher competition pressure are more likely to donate and donate more to differentiate themselves from their competitors.

Our paper also finds that firm size, profitability, ownership type, cash resources, and leverage are significantly associated with the CPDR decision. These results are consistent with major findings in the literature related to other natural disasters such as the South Asian tsunami, Hurricane Katrina, and the Kashmiri earthquake (Crampton and Patten, 2008; Muller and Whiteman, 2009).

Our findings offer useful implications for future research. Although the prior literature (e.g., Chapple and Moon, 2005) suggests that CSR activities are influenced by institutional environments, this perspective has not been tested previously in an emerging country. As there are important differences in cultural, institutional, legal, economic, and ethical backgrounds between developed and developing countries (Ge and Thomas, 2007; Lam, et al., 2008; Whitcomb, et al., 1998), our finding that firms in an emerging market use CPDR as a marketing strategy is an important contribution to the CPDR literature. Moreover, our finding also suggests that CPDR cannot be viewed in isolation from other corporate behavior or the economic environment. It is appropriate in future research to consider CPDR as part of both the economic and the cultural environments.

Our study also has implications for managers and governors. In view of rising natural catastrophes in recent years, corporate philanthropic disaster response is playing a growing role in helping societies recover from the disasters. Although governments and other non-profit organizations are major relief sources, corporate giving plays a major complementary role. Our results indicate that firms may not be purely altruistic when making donations, which is understandable because corporations have the objective to make profits for shareholders. Therefore the government and its regulatory bodies should consider designing mechanisms that motivate firms to make more donations and create a win-win situation for all related parties. Although this study sheds new light on CPDR, it has several limitations that may be addressed in future research. First, our research focuses only on the CPDR behavior of listed firms in China. While China is an important emerging market that provides a worthwhile research environment, our results may not generalize to other countries because institutional structure and national culture can affect firms' CSR behavior (Furrer et al., 2004). Future research could compare the strategic use of CPDR in different markets in order to better understand the roles of institutional structure and national culture. Second, data availability limited our sample to listed firms, while nonlisted firms may also donate. Examining the CPDR behavior of nonlisted firms is promising, as listed firms' donation decisions may be affected by investor sentiment in the stock market. Finally, although we show robust evidence that firms strategically use CPDR, we did not investigate the decision process and the determinants of the strategic decision. It would be a fruitful area to investigate how firms plan their CPDR strategies and their antecedent factors.

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## ABSTRACT

Enforcement action by the Securities and Exchange Commission in the years following its formation and prior to the beginning of World War II created reporting sanctions viewed as symbolic by much of corporate America. That is, powerful chief executive officers of many of America's giant publicly held corporations believed these sanctions were instituted only to placate a worried investing public and would not be enforced with rigor. These managers, therefore, believed they could either ignore the Securities and Exchange Commission pronouncements or implement them only superficially. I submit the result has been many continual challenges of authority and corporate disregard of ethical behavior throughout the remainder of the 20<sup>th</sup> century. This paper will explore the history of the early part of the 20th century to determine reasons why these symbolic pronouncements may have been perceived by the Securities and Exchange Commission as a necessity for its continued existence.

**JEL:** M49

KEYWORDS: Symbolism, power, ethics, fraud, acquiescence, conciliation

## INTRODUCTION

Ethics may be generally thought of as actions that are in accord with right or moral conduct. The American Bar Association (ABA) equates ethical conduct in business with proper corporate responsibility and morality, which they define as "behavior by the executive officers and directors of the corporation that . . . results from the proper exercise of the fiduciary duties of care and loyalty to the corporation and its shareholders . . . [well] beyond that demanded by minimum legal standards" (ABA, 2003, p. 4). The Securities and Exchange Commission (SEC) was formed as a result of the passage of the Securities Exchange Act of 1934 (SEC, 2011). It was a direct response by the newly-elected American government to restore public confidence in the U.S. capitalistic system that had been severely eroded by the stock market crash of 1929 (the "Crash") and the subsequent Great Depression of the 1930s. Determining how and why the SEC responded to corporate abuses of ethical behavior during its first six years of existence is the research topic of this paper. More specifically, this paper explains why the SEC functioned symbolically – enforcing the new securities laws by using symbolic pronouncements – in the face of extenuating circumstances over which it had only partial control.

I submit such symbolic solution to fraudulent corporate activity, however, not only emboldened those corporate managers bent on a disregard for ethical behavior, but also created an atmosphere of acceptable disregard throughout the remainder of the 20th century. Regulatory attempts to strengthen corporate governance, particularly in the last half of the prior millennium, finally culminated in the swift passage of the Public Company Accounting Reform and Investor Protection Act of 2002, better known as the Sarbanes-Oxley Act of 2002 (SOX). Examination of the history of the SEC's early years and of the economic situation leading to its formation is important. It points out problems that continue to exist in our capitalistic system today. Examination of the history of the American capitalistic system and of early attempts to mitigate bad corporate governance may therefore prove fruitful in examining current day problems and regulatory attempts. Indeed, parallels between the exuberance and subsequent sharp economic decline of two periods – the 1920s and the 1930s and the final decade of the 20<sup>th</sup> century and the first of the 21<sup>st</sup> century – are striking. Both periods had similar scenarios that lead to financial

difficulties. Both had extended periods of prosperity that seemed to be without an end. Both periods were characterized by a headlong participation in the market, and both were governed to a large extent with a *laissez faire* governmental attitude. This was especially true of the 1920s. Both had subsequent periods of corporate crisis that created anger and resentment; both created outcries for strong governmental oversight: and, perhaps most importantly, both postured the accounting profession in a defensive position which was only partially of its own making. Several early authors (Berle and Means, 1933, Dodd, 1932, 1935, Douglas, 1934) supported intervention into corporate governance and ethics by governmental fiat. These legal pluralists believed that the powerful corporate managers of their day were incapable of controlling their acquisitive instinct for power and could be restrained in no other way. Still others, particularly in later years (Anonymous, 1977, Kalbers and Fogarty, 1998, Levitt, 1998) point out that regulations cannot control a person or a group if those persons are determined to utilize their power in an unethical manner. The SEC was granted regulatory powers by Congress in 1934 (Merino, 2003), but Bealing et al. (1996) and Merino and Mayper (2001) both report a conciliatory stance by the SEC in dealing with the business world during its early years prior to World War II. This same conciliatory stance, however, produced symbolic pronouncements that emboldened already-powerful management of corporate giants because they understood that the SEC's pronouncements could be ignored with impunity.

Two periods must be analyzed to determine reasons for the SEC's methodology of dealing with instances of corporate fraud in its first decade of existence. The first period, from approximately the middle of the 19th century through the crash of the stock market at the end of the Roaring Twenties, elicits circumstances leading to the organization's birth. The second period, from the passage of the Securities Act of 1933 and the Securities and Exchange Act of 1934 through the 1939 examination of the McKesson & Robbins fraud, explains the organization's struggle to remain viable in the face of opposition from its opponents and, at the same time, exert its influence on the economic morass in which the United States found itself during this period.

## MIDDLE 1800s TO 1933

Capitalism was present in the 19<sup>th</sup> century in the United States, but only to a limited degree. Officers of corporations were, for the most part, locally or regionally connected with corporate shareholders in their locale. Boards of directors were composed of individuals with whom these owners were acquainted. Mutual trust among owners, officers, and stockholders was generally accepted by all as part of corporate financial dealings. The last half of the 19<sup>th</sup> century witnessed significant lifestyle changes in America. A pattern of power began to emerge within the economy of the United States that created an interruption of this mutual trust and of the agrarian lifestyle in America. The pattern emanated primarily from two major sources: compacting of the nation by the "Iron Horse" and vastly increased technology in communications. Compaction of the nation resulting from the Iron Horse not only made areas of the country more accessible, but also created a need for vast amounts of capital and funding.

Local and regional funding of corporations in the manner of prior years had no ability to provide the massive amounts necessary for this growth of the nation. Funds for production of a transcontinental connection needed to come from persons and institutions throughout the nation. Technological advancements, such as the telegraph and telephone, provided access to persons and businesses previously unknown. Together, these two factors created a change in the country that would never be reversed. Corporate growth exploded, almost totally lacking the attendant accounting for organizations' financial dealings. Urbanization proliferated in America's population, with jobs made available in large city factories that created significantly different lifestyles for many who had been used to slower agrarian circumstances (Previts and Merino, 1998). Individuals with keen foresight realized that significant wealth and power could be amassed by controlling the production of items needed by the railroads, as well as controlling the railroad companies themselves. These individuals maintained control of emerging giant corporations through a device called a "voting trust" (United States House of Representatives, 1913).

Terms under such an agreement generally called for shareholders to relinquish their voting rights to a trustee. These trustees, then, elected boards of directors for the corporations and, in general, controlled operations of the company (United States House of Representatives, 1913, p. 1018-1020).

It appeared that Congressional legislation in 1913 dealing with voting trusts had restored a balance between U.S. capitalism controlled by large corporations and protection of individuals. Very quickly, however, World War I – the "War to End All Wars" – interrupted. After a period of neutrality, America joined Allied forces and assisted in the defeat of Germany. This was a period in American history when dramatic major sociological changes occurred. Giant corporations drove the American capitalistic system and produced a significant amount of war material that had been instrumental in the Allies' victory in Europe. Businesses as a group received much of the credit for the effort that had won the war, and the general feeling was that business was no longer to be regarded as an evil. "Many people attributed the Allied victory to the creativity and ingenuity of American business people" (Previts and Merino, 1979, p. 197). "[T]he war had proven that business was 'moral'" (Previts and Merino, 1998, p. 238), and any thoughts of legislation restricting the power of corporate managers were reduced to insignificance.

#### The Roaring 1920s

The decade of the 1920s in America was one of significant growth -- described as a "wave of prosperity" (Carey, 1969, p. 35), as a booming economy (Adelberg, 1975), as "the so-called Golden Age of Business" (Previts and Merino, 1998, p. 238). A desire for new items on the market existed in all parts of the country; consequently, the decade was aptly described as the "Roaring Twenties." Victory in World War I produced a headiness in America, omnipresent from architecture to music to consumerism. Accompanying this headiness was the desire of many Americans to participate in the economic growth.

Berle and Means (1933) reported that the concept of wealth in property ownership was changing rapidly from material items – land, machinery, buildings – to ownership of passive property – stocks and bonds of the growing giant corporations. These two academicians were disturbed by their perception of the sinister direction that power within corporate America was taking in the Roaring Twenties. Their classic work, The Modern Corporation and Private Property, highlighted unchecked power accorded to managers of corporate giants and the accompanying dangers to the U.S. economy.

The power placed in the hands of managers of giant corporations, these authors asserted, threatened the foundation of the capitalistic system because it had been used in any number of cases without regard for what was best for stakeholders of the corporation. Power was accomplished through the use of handpicked, subservient boards (Berle and Means, 1933, p. 86) and the use of proxy certificates. Through the use of the proxy, corporate managers possessed power that was virtually unchecked and would therefore soon rival the power of the State. It thus required governmental regulation for its mitigation (Means, 1983). Here, then, an economic set of circumstances created an incubator for fraud and unethical practices. Corporations were growing exponentially. Some maintained good internal controls; some had nothing remotely resembling controls. The profession of accounting was floundering in attempting to report on the financial condition of these entities because of a lack of auditing standards. Americans seeking wealth were putting their life savings into corporate stock and were being totally unconcerned with methods being used by companies to amass that wealth. Regulation of markets was nonexistent, and "[i]n the absence of any regulation of the securities market, abuses were inevitable" (Carey, 1969, p. 35).

Fraudulent activities began to proliferate in the Roaring 1920s. I suggest three incidents in the early 20th century serve to define problems facing the new Securities and Exchange Commission as it attempted to mitigate bad corporate governance and restore stability and confidence in the capitalistic system. They are (1) the fraud committed by Kreuger & Toll, Inc., (2) the embezzlement by Richard Whitney, and, most particularly, (3) the fraud perpetrated by McKesson & Robbins, Inc..

## Kreuger & Toll, Inc.

Kreuger & Toll's empire paralleled the Roaring 1920s with its meteoric ascendance and collapse and created much of the outcry for regulative protection for investors and stockholders of corporations (Flesher and Flesher, 1986, Clikeman, 2003). For the accounting profession, Kreuger & Toll, Inc. represented a nightmare. The founder, Ivar Kreuger, known to the world as "the Match King," insisted on complete secrecy concerning the company's financial dealings. Kreuger apparently made up all of his company's financial statements and then instructed his corporate accountants to agree the company books and records with the made-up statements (Churchill, 1957, p. 249-255, cited in Flesher and Flesher, 1986, p. 423). The Match King's empire started in 1913, when Kreuger took over control of three small match factories belonging to his family. After the First World War ended, Kreuger realized that European countries – struggling to restore their economies after the vast destruction on the Continent – would be willing to do just about anything to obtain funds to rebuild. Kreuger & Toll offered governments of these countries loans of up to \$125 million dollars. The *quid pro quo* was a complete monopoly of the match market in that country (Marcosson, 1932, Flesher and Flesher, 1986, Clikeman, 2003).

Kreuger used the company's capital, rather than earnings, to pay shareholder dividends, and then depended on increased inflow from investors, in addition to any possible repayment of the European loans, to rebuild the company's capital base. In the 1920s, however, Americans were unconcerned that the methodology of maintaining the pyramid thus built was an unknown. The stock market crash, of course, brought to an end Kreuger's Ponzi-type scheme. Faced with a significant lack of inflow from American and other investors and defaults on a number of the loans made to European countries, and unwilling to be branded as a criminal while alive, Kreuger shot himself in the heart on March 12, 1932. Within a month, Price Waterhouse auditors revealed that almost \$250 million of assets reported by Kreuger & Toll did not exist (Flesher and Flesher, 1986, p. 425).

Kreuger epitomized the fear expressed by Berle and Means in their exposition of the economic situation of the 1920s. That is, Kreuger's Ponzi-type methodologies were illicitly practiced because the man had significant power and was, to his own mind, beyond the reach of ethical dicta and precedent. His refusal to allow any examination of the financial records of his company displayed not only an understanding of the vast separation of his position from proper corporate governance but also an untouchable aura in his own self-regard. He believed he was immune to any ethical or socially responsible principles.

#### 1929 Stock Market Crash

Five days in 1929 – from Thursday, October 24th, through Tuesday, October 29th – precipitated a period in which life in America would forever change.

The [Crash] in the fall of 1929 was a catastrophe beyond the worst predictions of the most pessimistic observers. The financial community was in a state of shock. Thirty *billion* dollars of quoted value of securities vanished in less than a month. . . . Financial paralysis gripped the country. Public reaction was bitter, and a critical review of the processes of the financial market . . . became an obvious political necessity. (Carey, 1969, p. 38, emphasis added)

The enormity of this free-fall can perhaps be put in better perspective by understanding that new Fords and Chevrolets were selling at the time for less than \$1,000. Seligman (1982) reports that the loss over the next three years, measured in real dollars of the period, increased to more than double the thirty billion initial loss. Small investors who had put their entire life savings into the market lost everything. Large investors – millionaires before the Crash – became little better than wage-earners within the ensuing first year. Indeed, as demonstrated by the loss of more than sixty billion in securities value over these

following three years, the American Dream crept close to extinction. Initially, the government under President Hoover exuded confidence that the American economic system would stabilize. Everything would be all right in a few months; let those companies who faced bankruptcy do so; have faith in the capitalistic system (Berle, 1963, p. 80). When things did not stabilize, investors pressured the federal government to step in and mandate reforms that would bring about stabilization.

#### 1933 Through 1939

#### Birth of the SEC

A new and energetic President assumed leadership of the United States government in 1933. He promised to deliver democracy from Wall Street conservatives back into the hands of the American people. Franklin D. Roosevelt's inaugural address assured the American people that "the only thing we have to fear is fear itself – nameless, unreasoning, unjustified terror which paralyzes needed efforts to convert retreat into advance" (Roosevelt, 1933, ¶1). A theme that resonated with many who had lost everything was Roosevelt's description of the Wall Street managers as "unscrupulous money changers" (Roosevelt, 1933, ¶1).

Within a very short time the new administration established control over publicly held securities by enacting the Securities Act of 1933 and the Securities Exchange Act of 1934. The latter created the SEC, a federal agency to which any corporation selling their stocks and bonds on public markets were required to report on an annual basis. All during these early years of the SEC, when disagreements between New Deal liberals and big business conservatives created a form of political limbo in the United States, the fate of the new organization was less than firm. On the one hand, President Roosevelt had promised to create stability in the marketplace and restore confidence of investors in the U.S. capitalistic system. On the other hand, business conservatives were adamant that the *status quo* remain solidly in their favor.

New Dealers in the Congress and the administration were facing a very strong lobby in the business powers of the day on the one hand and an unhappy accounting profession on the other (Kaplan and Reaugh, 1939). An SEC Accounting Series Release (ASR) in 1938 provided for compromise: accounting principles were to be promulgated by the accounting profession (with governmental oversight provided by the SEC), rather than by federal fiat (SEC, 1938). To a limited degree, then, this acquiescence by federal powers portrays a tenor of SEC early years. That is, enforcement hesitancy and willingness to accede to conservative Wall Street power signaled to managers of large corporations that much, if not all, SEC rhetoric was symbolic only and not meant to be rigidly enforced (Edelman, 1964, Merino and Neimark, 1982, Kalbers and Fogarty, 1998, Merino and Mayper, 2001, Merino, 2003).

#### Richard Whitney Embezzlement

A significant part of the disputation between those empowered by the new legislation – the New Dealers – and the "old guard" conservative business faction was the question of whether those who had been in a position of power could be relegated to a lower status by governmental fiat. Businesspersons who were accustomed to authority that was virtually unchallenged were now being required to follow mandates that were not to their liking. A habitude to unchallenged authority, however, creates an acquisitive need to maintain a constant or higher level of power and status, regardless of the methodology used to achieve this. The result in many cases was disdain for morality or ethics. Richard Whitney was such a case, but disposition of the Whitney fraud by the SEC represents another example of appeasement by the SEC.

Whitney was president of the New York Stock Exchange (NYSE) from 1931 to 1935. He was the embodiment of the moneyed "old guard" of Wall Street, having been born into wealth and position. He was educated in the finest of schools, represented the J. P. Morgan Company as its Wall Street financier,

lived in very expensive residences, and functioned as treasurer of the exclusive New York Yacht Club. Whitney had a glowing reputation among investors and a worried public, yet this well-respected individual had been embezzling for years from funds of investors who were using him as their Wall Street representative, thereby supporting his extravagant lifestyle (Anonymous, n.d., Maeder, 1999).

I suggest the Whitney fraud represents a telling example of action that should have happened and did not. Such a blatant case of fraud, even when uncontested by Whitney himself, affecting the American investing public should have elicited an immediate investigation by the SEC. Faced with this overwhelming evidence that outright fraud had occurred within the NYSE, however, the SEC drafted a response which basically stated their belief that matters were of a private club nature and should be handled internally by the NYSE. When it became clear that the NYSE would do little more than censure Whitney, the SEC functioned as it should have in the first place, convicting Whitney of embezzlement.. Two points appear salient: (1) The SEC, faced with very strong opposition from moneyed financiers who had considerable clout with members of Congress, had a very real necessity to use appeasement/ compromise/acquiescence to maintain continued funding and existence (Oliver, 1991, p. 146). President Roosevelt, seeking earnestly to restore confidence in the capitalistic system and placate investors, while at the same time advancing his New Deal policies, must have also understood that "draconic control" and regulatory enforcement would not be in his best interest.

(2) Corporate managers quickly perceived from both the Richard Whitney case and the McKesson & Robbins investigation that rigid regulatory enforcement by the SEC would not ensue. These rules were *symbolic* – meant only to dissuade investor worries by stating regulatory corrections to wrongdoings – and could be ignored or obeyed only superficially. Punitive measures for noncompliance would be nonexistent or enforced only lightly.

## William O. Douglas

In the years before he became the third SEC chair, William O. Douglas argued, as did Berle and Means, that because of the widespread ownership of corporate stock, "managers came to be their own supervisors, and the stockholders were moved into a position of effective subservience to those who by tradition and law were their servants" (Douglas, 1934, p. 1308). He asserted (p. 1327) that a fiduciary relationship between the board of directors and shareholders must be embodied in the board of directors as an initial contention of proper corporate governance. This necessity emanated from disparate shareholders' inability to control management or to "act intelligently" (p. 1316) in matters involving their investments. Government, therefore, must intervene, enforcing regulations for fiduciary relationships and protecting shareholders from rampant managerial power, as well as from themselves.

Merino and Mayper (2001) suggest that after he assumed SEC chair, Douglas "appears to act in favor of the *status quo* [restoring the American Dream in a liberal environment] due to his close relations with the accounting profession [and with business] and, in our view, being 'captured' by the [accounting] profession" (p. 502). They note that although he had been a strong proponent of regulatory enforcement in the years prior to his assuming chairperson, Douglas nevertheless became an active proponent of acquiescence as SEC head. I submit that Douglas may not have had much choice in this matter. I suggest Douglas was not so much "captured" by the accounting profession as he was placed in a precarious and delicate balancing position by circumstances over which he had only partial control. Douglas was, after all, directly responsible for the continued existence of the fledgling SEC organization. External pressures on the SEC were significant – from all sides – and its continued existence very likely depended on a "middle of the road" posture. In addition, President Roosevelt could not afford to lose any majority opinion that may have been present in Congress for his New Deal policies, nor could he afford to renege on his commitment to the American people to have social values as bedrock for their part of the American

Dream. Unfortunately, this compromising governmental posture translated to corporate managers as nothing more than symbolic rhetoric. Mckesson & Robbins

Just as the Richard Whitney embezzlement appeared to have given the SEC a victory in establishing a modicum of governmental oversight in the public marketplace, a third major fraud – perhaps the largest – came to light and challenged SEC authority – the McKesson & Robbins fraud.McKesson & Robbins (McKesson) was the largest distributor of pharmaceuticals in the United States at the time. The total consolidated assets reported on the December 31, 1937, McKesson balance sheet were somewhere in excess of \$87 million. Approximately \$19 million of these assets (approximately 21 percent) were nonexistent inventories and accounts receivable of the drug division of the Connecticut subsidiary of McKesson and of the Canadian subsidiary of the company (SEC, 1940, p. 3).

Conclusions of a preponderance of twelve expert witnesses at the SEC investigation agreed that having a "buffer" between the auditor and the CEO would have alleviated to some degree the inability of the auditor to challenge the power of corporate CEOs. These witnesses pointed out that (1) auditors were appointed by the CEO or senior managerial personnel of the corporation, and (2) limitations by client management on the extent of the audit were a reality. Most importantly, eight of the twelve witnesses said they would strongly favor a committee of the board of directors (which several of the witnesses even called an "audit committee") as being responsible for appointing the auditor and handling the details of the audit, such as scope and fee. Three of the remaining four said the board itself should be responsible for this task (SEC, 1940). Of singular importance to corporate managerial understanding of the status quo, regulatory pronouncements emanating from the McKesson & Robbins investigation by the SEC were directed at the accounting profession, not corporate managers. I suggest it was significantly easier for the SEC to impose regulatory promulgations on the external auditing profession - the CPA - than it was to inject these into corporate accounting and corporate governance. To foist regulatory edicts on major corporations meant the SEC would be challenging corporate power, something the liberal encampment was unwilling to do. Were this to be done, I submit the SEC very likely would have been committing political suicide. Realization of this meant symbolic pronouncements were needed, and translation of this symbolism to corporate managers meant "business as usual" for the foreseeable future.

## CONCLUSIONS

Following Berle and Means (1933), I note an incredible amount of power was placed in the hands of a few key corporate individuals because of the way in which the capitalistic system in the U.S. evolved. Many of these individuals, instead of functioning as fiduciaries for corporate owners throughout the U.S. and the world, used their power to create unassailable empires for themselves. I posit ethical misconduct in the capitalistic system and "bending" the system to one's advantage, done in the early 20th century by a number of key management persons in large U.S. corporations emanates from the symbolic enforcement of the securities laws by the SEC in its early years. I suggest these corporate managers "learned," from this symbolic enforcement of regulatory edicts by the SEC in its early years, that aggressive accounting and bad corporate governance not only was still possible but also was the methodology that should be employed to maintain the immense power held by these individuals.

This conciliatory approach to oversight of America's capitalistic system is best shown by what amounts to an abrupt political metamorphosis of the third chair of the SEC, William O. Douglas. My analysis of the political situation during the first decade of the SEC's existence suggests that Douglas may have adopted this acquiescent stance to maintain Congressional funding of the SEC and maintain its viability, not because of any "capturing" by the accounting profession.

The fledgling organization was expected from the outset to control unchecked corporate managerial power and restore morality and social ethicality to the system. From the outset, though, the organization was faced with a multitude of conflicting concepts, each powerful in its own right, of the way the system should be corrected (or left alone). Both Congress and the SEC were pressured by a very powerful bloc of conservative businesspersons to thwart any attempt at federal regulation of corporations. If the SEC were to achieve institutionalization, however, it would need continued funding from these Congressional legislators. Labor unions actively sought federal regulation of corporations and of the accounting profession; the accounting profession was adamant in its refusal to agree to this federal control. Faced with pressures from these different factions, the SEC adopted a conciliatory stance in many of its early decisions and rulings. Finally, the SEC succeeded in two important ways: (1) It mollified investors and re-established a modicum of faith in the capitalistic system, and (2) it institutionalized itself by maintaining continued funding from Congress. In the final analysis, it was very likely the use of conciliatory/acquiescent action that allowed these successes.

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# IDENTITY AND STATE-BUILDING: INSIGHTS FROM POST-COMMUNIST EASTERN EUROPE FOR POST-PARTITION KOREA

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## ABSTRACT

The political circumstances of Korean reunification will help determine the overarching political environment for future public administration. This context will create the parameters for government capability to implement the imperative of the exercise of sovereignty over the newly-reunified Korean peninsula. A reunified community emphasis will be upon shared commonalities that serve to mobilize cooperation after nearly 70 years of separate development under radically opposed political and economic regimes. Pan-Korean nationalism will be problematic in generating political mobilizational resources for creating the foundations for pan-Korean civil society. The North's vestiges will remain in the form of organized crime formations in a post-reunification state. Political strategists should prepare to respond to the political tendency to manipulate and exploit anti-Japanese symbolic messages by Korean political entrepreneurs mobilizing prospective supporters both in North and South Korea. Some relevant comparisons with the East European cases of transition from Communism provide insights into what to expect.

## **JEL:** F50

**KEY WORDS:** Bulgaria, China, Cold War, collaboration, colonialism, communism, consumerism, corruption, DPRK, East Germany, Eastern Europe, GDR, Germany, globalization, image, imperialism, Iran, Iraq, lustration, Japan, Korea, mafia, nation, North Korea, organized crime, public administration, reunification, ROK, Romania, social movement, state-building, stereotype, totalitarian, United States, West Germany

## **INTRODUCTION**

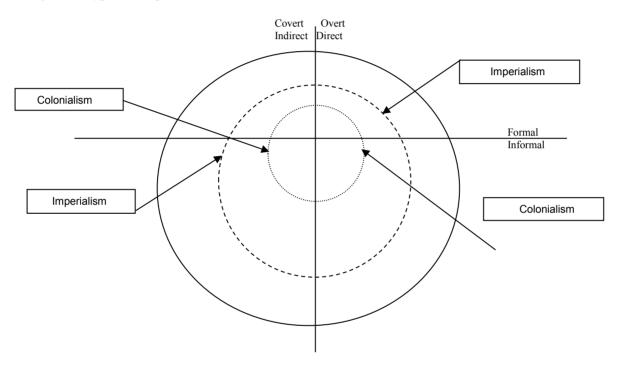
A strong political attitudinal legacy from the historical experience of Communism will remain in northern Korea in a post-reunification environment. While a comparison of this legacy with Germany may seem most appropriate, comparison with the Bulgaria and the Balkans would also be relevant because North Korea's current political and economic contextual conditions are arguably more similar to Communist-era Bulgaria than to East Germany. Post-reunification economic scenarios are more likely to follow the German model; the economic and political disparities between North and South will result in the latter being the nucleus for a Korean nation-state. However, the political course by which this reunification will occur will significantly affect the extent to which corruption and organized crime centered on the North will characterize the political economy of a newly-reunified Korean nation state. The level of efficacy that the authorities in a unified Korea will demonstrate in suppressing corruption will not likely be as effective as it has been in the reunified German nation state.

Historical political development: the legacy of colonialism

The Bulgarian state, partly as a consequence of centuries of colonialism and dependent development, is a comparatively weak administrative state today as evidenced by its relatively high levels of corruption (Miller, 2008). In the 1989 Eastern European "demonstration effect" environment, mass demonstrations also occurred in Bulgaria to bring down the Communist regime on 10 November 1989 (Linden, 2009). Yet, as in North Korea Communist Bulgaria never manifested a comparatively significant elite dissident

social movement, not to mention one with active support among the mass public base (US Government). The comparative examples of dissident social movements in neo-Stalinist post-1968 Czechoslovakia or in the German Democratic Republic indicate that explaining the relative absence of organized societal dissent in the Bulgarian or North Korean case as due to exceptional levels of coercion is necessary, but not sufficient. The vibrancy of the Czechoslovak dissident movement is highlighted in Gale Stokes, ed. (1991). Steven Pfaff provides an overview of the development of the dissident movement in the 1970s in the German Democratic Republic that focused on the Lutheran Church (2001). An explanation should include the paradoxes and dilemmas in Bulgarian "national" identity that significantly stem from its largely dependent, colonial Balkan historical political evolution. A comprehensive understanding of Bulgaria and North Korean contemporary political attitudes towards the state requires an understanding of the attitudes towards authority that generations of Bulgarians and North Koreans learned during periods of imperial occupation and passed on through socialization to their offspring.

Figure 1: Types of Imperial Control (Cottam, 1977)



The method by which the external imperial power attempts to control another community will affect significantly the latter's subsequent political development. The history of imperialism should be examined in terms of the temperament and the forms of control. The legacies of these imperial experiences affect the process of national political value formation and attitude expression, which includes both the prevailing identity community basis for nationalism as well as the prevailing ideology that associates with it (Rock, 2008). In direct, formal colonial rule, the imperial power imposes its ultimate control through placement of a supreme political authority publicly representing the sovereign authority of the imperial state. This type of colonial experience has a greater potential to unify the native political elite of different constituencies in the community in the course of resistance to this form of imperial control. This form of imperial control is probably the least detrimental in terms of its legacy for state-society relations; the local population at least can more clearly 'see' who the enemy is. Japanese imperialism in Korea may be categorized as such. In contrast, indirect-formal rule is in place when local, traditional elites rule in the community with the 'advice' of the imperial power in the form of advisors, security arrangements, etc. Today, it may also be attempted through legitimation of an external

intervention by international organizational mandates granted, for example, by NATO, the EU or the UN Security Council. Indirect-informal imperial control is maintained without the overt presence of imperial personnel, although the imperial power continues to exercise ultimate control over the local ruling elite.

During the postwar period, Moscow exercised control through its client elite in local Communist parties and the respective security apparatus in each Warsaw Pact country. If these control mechanisms collapsed, the USSR would directly intervene, as in East Berlin in 1953, Hungary in 1956 and Czechoslovakia in 1968. The USSR did not have military bases in Bulgaria and Romania, unlike in Poland, Hungary, East Germany and Czechoslovakia. A current topic of media speculation is whether the People's Republic of China would militarily intervene to prevent the collapse of the Communist regime so as to prevent reunification with the US-allied South (Lim, 2012). In this case, the nature of the North Korean regime would change with the overt presence of Chinese soldiers supporting the DPRK authorities. Such a scenario would constitute another test of the strength of pan-Korean nationalism today in the DPRK. Finally, in informal, direct imperial control, the imperial power invades and becomes the ruling class (e.g. Arabs into Egypt, Normans into England). In the contemporary era, one case that may plausibly be moving in this direction is the Israeli colonization of Palestine.

Informal imperial rule typically means that the imperial power does not acknowledge that it has sovereign authority within the country; it has only an embassy and the imperial power works through the local bureaucracy (Chandler, 2010). Chandler (2010) focuses on Africa. David Chandler (2006), focusing on Eastern Europe, argues that imperial powers today do not admit that they control countries because it is no longer publicly acceptable. A theme in both works is a comparatively greater disconnect between the state ruling authorities and their international patrons in Western Europe and North America, on the one hand, and the mass public in post-colonial states, on the other hand. The inference is that indirect control aims to reduce the costs of imperial control by lessening resistance to it through attempting to obscure it. This obfuscation can be promoted through a dependent, compliant local elite that has formal sovereignty.

Whether or not the political influence of an external imperial power is intolerably high is a subjective judgment by different groups and identity constituencies having varying degrees of authority within the target community. One unfortunate legacy particularly of informal imperial intervention is a strong propensity for the emergence and crystallization of community identity cleavages, polarizing stereotypes and intense suspicions within the previously subjected community regarding who 'collaborated' with the imperial powers in the past and therefore is more likely to 'collaborate again' in the contemporary machinations of the imperial powers in the area. During intense conflicts, the result may be genocidal violence.

## Political Psychology And Korean Nationalism

Cottam and Cottam's theory of nationalism presents patterns in perception of group image stereotypes towards perceived sources of challenge to the national "in-group," as well as associated behavioral predispositions and derivate political strategies:

In responding to a negative social comparison by an in-group towards an out-group, e.g. particular Koreans' self-image in relation to North or South Korea, Japan, the US or China, an in-group may respond psychologically in different ways. Between actors perceived as relative power equals, social "competition" refers to direct competition between groups for status and influence. In intense conflicts thereby perceived as zero-sum, one side's perceived systematic gain in influence and status in the domestic or in the global political system, as in full-scale war (hot or cold) situations, is perceived as the other side's loss (Cottam and Cottam, 2001). North and South Korean regime competition both for international and intra-Korean recognition for nationalist legitimacy can be understood in these terms.

Table 1: Image Attributes of a perceived source of comparative challenge (i.e. threat or opportunity) to perceived status of the nation (in this case, Korea) (adapted from Cottam and Cottam, 2001):

Image/	Capability	Culture	Intentions	Decision	Threat/
Stereotype	(as	(as perceived)	(as perceived)	Makers	Opportunity
	perceived)			(as	(as perceived)
				perceived)	
"Enemy"	Equal	Equal	Harmful	Small elite	Threat
"Barbarian"	Superior	Inferior	Harmful	Small elite	Threat
<u>"Imperial"</u> (stereotype of	Superior	Superior	Harmful	A few	Threat
targeted imperial power by the				groups	
colonial/client)					
"Colonial/	Inferior	Inferior	Benign	Small elite	Opportunity
Client" (stereotype of targeted					
colonial subject by the imperial					
power)					
"Degenerate"	Superior or equal	Weak-willed	Harmful	Confused, differentiate d	Opportunity
"Rogue"	Inferior	Inferior	Harmful	Small elite	Threat
"Ally" (the individual social	Equal	Equal (today,	Good	Many	Threat (jointly shared towards a
relationship analogue is	•	tends to be		groups	third actor by two "allies"; i.e. the
"friend.")		equated with perceived			enemy of my enemy is my "friend")
		technological			filend )
		proficiency)			

The legacy of imperialism includes a predisposition by the subject of control to stereotype the controlling external actor in accordance with the "imperial" stereotype. The controlling power, in turn, is prone to stereotypically view the controlled community in accordance with the "colonial/client" stereotype. After generations of domination by Russia, the post Cold War democratic regime in Bulgaria has recently become a Western ally in the US-dominated North Atlantic Community. After 35 years of occupation by Japan, postwar South Korea is historically a client and today an ally of the US against North Korea/USSR/China.

Table 2: Political	Images a	nd Social-Identity	Strategies	towards the	e challenger (	(Cottam and	Cottam,
2001):	-	-	-		-		

Group Image/Stereotype of perceived challenger	Social-Identity orientation behavioral patterns towards the perceived challenger
"Enemy"	out-group; creativity, competition when possible
"Barbarian"	out-group; creativity, indirect competition
"Imperial"	out-group; mobility, creativity, competition when relationship is unstable
"Colonial/Client"	out-group; maintain status quo
"Degenerate"	out-group; competition
"Rogue"	out-group; competition, destroy
"Ally"	in-group; mobility, creativity

Stereotypes developing out of extended, conflictual political relationships on the basis of perceived critical group cultural and capability differences produce patterns of social perception and behavior towards the perceived source of political challenge. The social psychological perception of an in-group towards and an out-group in turn produces systematic behavioral attitudinal predisposition patterns in interaction categorized in terms of social "mobility," "competition," and "creativity" by the perceiver on the basis of these stereotypes.

Social "creativity" strategies aim to preserve a positive group self-image through creating a collective perceptual reality in which different, equally valid 'yardsticks' for evaluation apply to different groups, i.e. "different but equal." One may argue, for example, that the North Korean renewed emphasis on the *juche* ("self-reliance") policy may be understood partly as a new regime self-justification with the collapse of its USSR patron and the ending of its subsidies following the end of the Cold War. In this regard, B. R. Myers notes North Korea's self-referent derogatory references to South Korea as a "yankee colony" (2011). Daniel Byman and Jennifer Lind note the North's reference to the South as "the foul whore of America."

Social "mobility" strategies refer to seeking to join and assimilate into the perceived, 'superior' outgroup, including an Americanized-globalized multinational political and economic community. The pervasive influence of American political, economic and cultural models within South Korea, are arguably more acceptable due to the social mobility opportunities that very successful economic development within the context of American hegemony has provided.

South Korea's Cold War client status relationship with the US provided enormous social mobility options both for individuals and the southern two-thirds of the Korean nation while confronting the Communist control of the northern third of the population and its territory. American tutelage helped provide this social mobility (Cottam and Cottam, 2001). It provides a strong incentive to the ROK to continue to acquiesce to American hegemony while national unification as a prerequisite for national selfdetermination has not been achieved (Greenberg, 2004). South Korea serves to validate the development model that the US promoted during the global Cold War conflict. American authorities advocated this model in the midst of the perceived competition with the USSR for allegiance among the newly independent countries emerging or re-emerging from the postwar wreckage of empires (Linantud, 2008). The neighboring propinquity of North Korea magnifies this South Korean appeal: the failed, "alternative" Korea lies across the 38<sup>th</sup> parallel conveniently available for immediate comparison. The division of the Korean nation apparently created a de facto laboratory for comparing the two systems to determine their value. The application of image theory from political psychology provides insights into the challenges confronting pan-Korean state building. National communities inheriting a recent legacy of Great Power imperial domination may manifest this legacy in an attitudinal behavioral predisposition which derives from a national ethnic majority image of 'self' versus the external and internal 'other' which corresponds to the imperialist-colonial/client image relationship (Cottam and Cottam, 2001).

Image of perceived challenger	General Policy Predispositions towards perceived challenger	Policy Predispositions towards perceived challenger in intense conflicts
"Enemy"	Wary suspicion, containment	Hostility, defense
"Barbarian"	Fear, form alliances	Preemptive strikes, precipitate alliance intervention (potential for genocide)
"Imperial"	When domination is stable: fear, avoid conflict, submit	When conflict is unstable: anger, shame, struggle for liberation
"Colonial/	Paternalistic policy guidance and direction	Most commonly nonviolent repression
Client"		
"Degenerate"	Contempt, mobilize for competition	Disgust, offensive aggression
"Rogue"	Derogate, isolate	Hostility, violent repression (potential for genocide)

Table 3: Images and Policy Predispositions (Cottam and Cottam, 2001)

Perceptual and behavioral attitudinal patterns in turn generate policy behavioral predispositions by an in-group towards the perceived source of political challenge. Policy behavioral predispositions may change as the political relationship becomes unstable, weakening assumptions regarding relative capability and cultural superiority and inferiority. Perceived opportunities and threats may thereby intensify, producing more intense political conflicts, reinforcing stereotypes and the emotional affect that accompanies them, creating significant potentials for violence.

A future, unified Korea's integration under the ROK regime attitudinally will include various constituencies which have a collective historical memory of domination by others. In states with a historical legacy of imperial control by external actors, the state is more likely to be seen in popular attitudes as a distant, threatening, powerful entity serving its own interests. Moreover, although South Korea has had a liberal political regime for a generation since 1987, the contemporary North Korea state itself had much of its foundations laid under the "Sultanism" of the continuing, decades-long dictatorship of the Kim dynasty (Hymans, 2008). Gene Sharp, an analyst of non-violent direct action challenging the status quo that characterizes critical social movement reform activity, portrayed this view as a monolithic or "self-sufficient" image of the state and its power capabilities. It stands in contrast to a popular consent-based image of the state and its power (Sharp, 1973; Ackerman & Kruegler, 1994).

## Comparative Communist And Post-Communist National Development

With the arrival of Communism with the Soviet Red Army, Germany was already a fully industrialized and politically mobilized society. The section of the German public that lived in what geographically became the German Democratic Republic had already undergone the political socialization process into German national statehood. German national identity, in other words, had already been established. As a consequence, an East German "national" identity never gained sufficient intensity to supersede pan-German national identity, despite strong efforts by the Communist regime to inculcate one (Federal, "East Germany"). Partly for this reason, the collapse of the East German regime was not only remarkably peaceful, but the GDR legacy left comparatively little impact on prevailing political attitudes in the former East Germany. The post-Communist "Party of Democratic Socialism" had some electoral support, but east German politics is dominated by the same major parties that have dominated west German politics since the formation of the German Federal Republic in the 1950s.

During the postwar period, both Bulgaria and North Korea underwent a period of rapid, forced economic, social and political change under a Communist totalitarian regime. This change can be labeled modernization depending on the indicators that one may choose, but both did rapidly change. During this same period, the People's Republic of Bulgaria acquired a reputation as the closest ally of the USSR in the Warsaw Pact (Dyer, "Bulgaria won't be celebrating 1989"). North Korea's political development under Communism was rather more similar to the experience of the east European nation states, in particular more similar to the Balkan states. In these states, Communism largely brought "modernity" to these societies that, with few regional exceptions (e.g. the Czech lands) had been overwhelmingly rural. Consequently, the respective former national Communist parties, after reforming themselves, have become one of the pre-eminent political parties in all of these states. Indeed, there seems to be a positive correlation between the level of economic development in these states at the time of the arrival of Communism and the level of popular political support for post-Communist/socialist parties (Toole, 2007). Toole concludes that the pre-Communist historical legacy of Eastern Europe affected significantly the respective post-Communist political party structure that emerged in east central Europe. Toole views this structure as in accordance with the Lipset-Rokkan model's focus on the historical legacy in political cleavage formation in contemporary west Europe. In countries such as Bulgaria and Romania, these parties have successfully transformed themselves into viable majority parties. They have kept, lost, and then regained control of the government through elections, and they still represent an organizational model for a successful East European political party (Klesner, 2007).

In the Communist Romanian case, the correspondence with North Korea is not only empirical, but also intentional. According to some reports, Nicolae Ceausescu actually sought to emulate the political model he personally witnessed in North Korea while visiting there in 1971 (Tolnay). In the case of Bulgaria, a stronger parallel exists with North Korea insofar as the entire Bulgarian polity entered modernity, like North Korea, through exceptionally close modeling of its own development strategy after one or both of the Communist Great Powers. Bulgarian politics today, a generation since the 1989 changes, continues to include charges against the Bulgarian Socialist Party for its refusal to repudiate its leaders in the 1970s who voted to apply to join the USSR as the USSR's 16<sup>th</sup> republic ("Bulgaria," 2012).

Communist Romania under the Ceausescu dictatorship adopted the posture of vigorous non-alignment vis-à-vis the Warsaw Treaty Organization until the late 1980s and the entrance of Solidarity into the government in Poland (Deletant, 2007). Yet, Romania remained in the Council for Mutual Economic Assistance and therefore it remained economically integrated in the Communist block. The DPRK did not have the public pretense of being ostentatiously independent from either the USSR or the PRC or both until the end of the Cold War resulted in far-reaching declines in economic subsidies heretofore provided to the DPRK. The DPRK was integrated into the Communist block economic system to the extent that the loss of the Soviet economic subsidies in the early 1990s resulted in mass starvation and death for perhaps 5% of its population (O, 2011). Thus, the DPRK's continuing political inability to adapt to the loss of these subsidies contributed to the famine that killed hundreds of thousands, perhaps millions, in North Korea in the 1990s. At this time, the regime accentuated its *juche* (self-reliance) official ideological doctrine.

Prior to the end of the Cold War, North Korean development strategy appeared to be the most ideological orthodox in terms of conformity with Marxist-Leninist-Stalinist principles. North Korea represented the attempt by the North Korean leadership to prevail in the domestic and international competition for representational legitimacy for the entire Korean nation through greater development success in comparison with the American-dominated South. North Korea had comparative success with the ROK until the 1970s, until which time per capita income was similar to that in the ROK (Lankov, 2006).

The DPRK confronted adversaries in South Korea, the United States and Japan after the disastrous and catastrophically destructive Korean war. Accordingly, the DPRK regime had strong political incentives to ally closely with the USSR and the PRC and adopt their economic and political models. The legacy of this commitment, however, remains a critical political issue because unlike Bulgaria, the survival of the DPRK regime equates with the survival of the state. Whereas post-1989 Bulgaria could adopt far reaching political and economic reforms, albeit in comparative fits and starts, the DPRK regime does not have this option without abnegating itself like East Germany (Cottam and Cottam, 2001).

Therefore, modernity in DPRK generates unsolvable political dilemmas that will likely translate into elements of the coercive apparatus transferring their identity profile into parochial identities, including mafia organizations in a reunified Korea. The DPRK identity profile is notably much stronger than was the GDR among its population (Myers, 2011). The greater comparatively political obeisance of the DPRK public to the DPRK authorities contrasts with the comparatively more problematic identity allegiance of the South Korean public with regard to the ROK state (as opposed to the pan-Korean nation) (Myers, 2011). The security apparatus is not so readily going to disintegrate as it did in the former GDR. Rather, they are more likely to transform into organizations that specialize in organized illegal economic activity, such as illicit arms shipments, like their Bulgarian counterparts (Hope and Troev, "Bulgaria struggles"). The legacy of Japanese, Chinese, Soviet and American imperialism in Korea will likely generate a significant potential for intense polarizations in this regard in a post-unification political environment. As in Bulgaria and in the Balkans more generally, Korean organized criminal organizations emerging out of the security services will likely seek domestic political support by associating themselves with romantic nationalist stereotypes. The heroic mythologization of Kim II-sung and his family as guerrilla unit fighters in the anti-Japanese struggle is noted, for example, in Daniel Byman and Jennifer Lind (2010).

It compares with the romantic "bandit" image in Balkan folk imagery of early resistance against the Ottoman Turks (Giatzidis, 2007). It implies that this theme would be a readily available one as a set of romantic national symbols to manipulate to appeal for public support by political entrepreneurs in a reunified Korea. The disputed legacy of the ROK state with its foundations during the Syngman Rhee era will become more prominent in the competitive political discourse of a reunited Korea (Greenberg, 2004). Greenberg recounts Syngman Rhee's reliance on the Japanese-affiliated Korean National Police, with American backing, to assassinate the most prominent political figure in the South, Yo Unhyong, and thousands of his supporters to pave the way for his own election as President. Without the lingering threat from the North to motivate some degree of collective regime-enforced or self-censorship, a full discussion by groups, parties and constituencies competing for political support in the democratic political system will ensue regarding the Japanese occupation and subsequent partition period (e.g. "Censorship"; "South Korean Journal Backs Down").

During the Cold War, the US worked with local authorities that were seen as cooperating with the US containment strategy in Asia. Containment contributed to horrendous suffering, but it also contributed to South Korea's economic "miracle" (Linantud, 2008). China's intervention in the Korean war saved the Kim Il-sung regime. China's perceptions of and policies toward a reunited Korea will largely depend upon the political circumstances and scenarios under which this reunification occurs.

A plausible supposition, however, is that China's acquiescence to the disintegration of the DPRK regime and its absorption by the ROK will require that the Chinese authorities view the ROK as not being a threat to China's security interests in East Asia. Success in persuading the Chinese authorities of the benign intentions of the ROK will depend upon various factors, some of which are not directly under ROK control, i.e. the intensity of conflict in the US-PRC relationship. Nevertheless, the ROK authorities will need to persuade the PRC that the ROK is not a threat to PRC security and economic interests. Indeed, the ROK authorities may work to convince the PRC that a re-united Korea under the ROK regime will generate greater economic and security benefits for the PRC. In this scenario, then, the ROK authorities would feel strong pressure to accommodate to the economic investments that the PRC is evidently already undertaking in the DPRK in mining and other sectors (Choe, "North Korea"). The South Korean leadership has emphasized that recently adopted ROK-US Free Trade Agreement will make the ROK a more attractive site for Chinese and Japanese investment in order to export to the US market ("S.Korea," 2012). China's current investments in the DPRK, therefore, may become even more valuable as part of an expanded ROK. It will also serve as another incentive to China to accommodate to the extension of sovereign ROK law, including public administration law, into the North.

### The potential for Japanese scapegoating in Korea

In Korea the portrayal of the founding South Korean authorities as "traitors" to the nation may receive a surprisingly receptive audience (Myers, 2011). This disturbing realization implies that the prospect for violence in the reunification process may be significant. In terms of reunification political scenarios, the legacy of the conditions during 1945-50 will in all likelihood re-emerge as competing elite factions and their constituencies in a reunified Korea seek to mobilize public opinion to the extent possible around claims to nationalist legitimacy (Lankov, 2006). Lankov highlights the ongoing official public commitment to pan-Korean nationalism defining the formal ideology of the ROK, despite the quite different reality of increasing ROK discouragement of economically burdensome DPRK refugee flows into the ROK as of the mid-2000s. Note that South Korean political discourse today has legitimated renewed investigations regarding charges of collaboration with the Japanese.

As recently as 2008, South Korea's equivalent of a "truth commission" issued a report listing various foundational ROK figures officially as "collaborators" with the Japanese, including Park Chung-hee, the military ruler during 1961-79 popularly credited with overseeing the formative period of South Korea's economic "miracle" (Kang, 2009). Kang's article commemorates the 30<sup>th</sup> anniversary of Park's assassination by one of his closest aides, the Director of the Korean Central Intelligence Agency, Kim Jae-gyu. Park Chung-hee's daughter, Park Geun-he, is one of the leading nominees to be the next president of the ROK in December 2012 elections (McCurry, 2012). Park Geun-hye has received primary credit for leading the ruling "New Frontier" (*Saenuri*) party to a surprise retention of its majority in parliamentary elections in April 2012. The current ROK president, Lee Myoung-bak, of the *Saenuri* party is constitutionally prohibited from seeking re-election.

In a process that accelerated beginning in 2006, the South Korean authorities expropriated property from the descendants of identified collaborators with the Japanese (Ryall, 2010). According to this report, the South Korean authorities had seized 11 million square meters of land evaluated at 112 million British pounds. In sum, South Korean political discourse has already contributed to the legitimation of this theme of collaboration. Integration of a post-Communist North into the ROK state will very likely witness an intensification of this theme in democratic ROK politics to appeal to discontented constituencies across the political spectrum. In the South will be located those constituencies footing the very large bill for integrating the economically decrepit North into South Korean market institutions. Similarly, in post-unification Korea, calls will likely intensify for indemnities and reparations from Japan for its actions during the colonial period (Hancocks, 2012). Japanese reparations to S. Korea were supposedly resolved under the "Treaty on Basic Relations between Japan and the Republic of Korea"

signed in 1965, under the Park Chung-hee military dictatorship. However, the nature of the S. Korean regime and its policies, together with subsequent publication in 2005 of the treaty preparation documents, have contributed to continual demands for revision of the terms of the treaty.

These calls have a particular focus on the plight of S. Korean women enslaved as sex workers for the Japanese imperial military during World War, the so-called "comfort women" ("Treaty"). The intensification of the ROK-Japanese territorial and historical conflicts with South Korean president Lee Myoung-bak's first-ever visit to disputed Dok island by a sitting president in the lead up to the December 2012 ROK presidential elections illustrates the incentives to Korean politicians to exploit this issue (e.g. "BBC," 2012). In a post-reunification context, this discontent will be larger in response to the high profile political attitudinal differences between Southern residents and Northern internal economic migrants seeking work and economic support in the South. In the North will be located constituencies and groups facing invidious comparison and often perceived humiliating treatment by the South (O, 2011). The political context will be favorable for political entrepreneurs manipulating romantic anti-Japanese Korean nationalist symbols to mobilize political support and activity that bridges the numerous legacies of the North-South divide.

## CONCLUSION

The legacy of imperialism and partition in Korea will manifest itself in a reunified Korean peninsula in terms of challenges to public administration. The conflictive situational political dynamics on the Korean peninsula leading to DPRK collapse are likely to include appeals to pan-Koreanism focusing on anti-Japanese demands. DPRK military and police security structures are likely to enjoy lingering, strong albeit declining national popular authority in northern Korea. The interrelated sources of this authority are likely to include habitual normative obedience as well as utilitarian authority through the economic resources that they will still control. Other sources of support will include their leadership's public calls associating themselves with popular anti-Japanese sentiment that would transcend the substantial perceptual, attitudinal and value differences between northern and southern populations that would characterize a reunified Korea. These security structures will likely continue to linger on as organized crime networks at least on a scale comparable to that witnessed in post-Communist states in Southeast Europe. Elements among them are likely to transform into the nuclei for political factional and party formations. In order to work to prepare to counteract the effects of nationalist demagoguery in Korean public opinion. South Korean civil society actors such as universities and churches should continue to work to develop cooperative ties with Japanese governmental and non-governmental society representatives.

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# DEVELOPING BUSINESS COMPETENCES THROUGH THE USE OF A LANGUAGE PORTFOLIO

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## ABSTRACT

Competence formation is one of the most effective ways to prepare future professionals to successfully deal with constantly changing working conditions. In Mexico, the implementation of such educational model is already taking place. This paper proposes the use of a Language Portfolio to develop the communicative competence in English as a Foreign Language (EFL) of university students aiming to achieve B2 level according to the Common European Framework of Reference for Languages. The use of portfolios has proven to be a useful tool to enhance learning by asking students to reflect on their own motivation/need to learn and their learning strategies while promoting autonomous learning and self-evaluation strategies. By allowing both teachers and students to experience the benefits of using a Language Portfolio, the learning and metacognitive strategies developed can be expanded to the learning of business competences through the use English and, thus, contributing to their learning of both professional and communicative competences.

**JEL:** I2, I23

KEYWORDS: competences, communicative competence, autonomous learning, business competences.

## INTRODUCTION

The competence concept in education concerns with the capacity of students to analyze, reason and communicate effectively as they pose, solve and interpret problems in a variety of subject areas and has been considered important due to its relevance to lifelong learning. Being able to do so in one's mother tongue is by itself one of the aims of public education policies, leaving behind the very basic objective of teaching literacy and numeracy and including today information technology as well as the learning of a foreign language. Thus, the role of education in school is seen as to provide the generic skills needed to acquire new knowledge and specialist skills in the future: learning how to learn.

In México such a foreign language is of course English. English as a Foreign Language (EFL) was introduced as a mandatory subject into the middle-school curriculum for all public schools since 1993 (Ministry of Education -Secretaría de Educación Pública- Agreement 182) and last year's education reform made it mandatory for basic education (Agreement 592, dated August 19, 2011), as a part of the implementation of a competence-based curriculum. Besides intending to raise the quality of education, this measure was implemented with the long term objective of facilitating international student and academic staff mobility. This seems to confirm that the learning of English appears to be losing its separate identity as a discipline and merging with general education (Graddol, 2006).

Historically, the need to fluently communicate in English has become essential in business and for travel. Besides the communicative function of the language itself, English is essential to the deepening integration of global service-based economies. But even in non-English speaking countries, being communicative competent in English can be considered necessary (sometimes even a must) to get a well-paid job, regardless of the professional area one works in. This is particularly true as the outsourcing business grows, since most of the offshore contracts come from English speaking corporations and global enterprises create their own business process outsourcing centers in other countries to diminish costs.

Up to now, English is the language that facilitates transnational encounters and allows nations, institutions, and individuals in any part of the world, to communicate their world view and identities. This study attempts to provide a tool students can use to make connections between positive learning outcomes and success experienced in a coursework on learning English for general purposes and using the language to perform tasks required in the professional domain of business administration.

The article concludes with a discussion of the possible benefits of implementing a learning portfolio within the curriculum of the business management degree at undergraduate level at the Universidad Michoacana de San Nicolás de Hidalgo (UMSNH). the communicative COMPETENCE Users and learners of a language draw upon a number of competences developed in the course of their previous experience in order to carry out the tasks and activities required to deal with the communicative situations in which they are involved. In return, participation in communicative events (including, of course, those events specifically designed to promote language learning) results in the further development of the learner's competences, for both immediate and long-term use. In that sense, all human competences contribute in one way or another to the language user's ability to communicate and may be regarded as aspects of communicative competence. The Council of Europe (2001) defines some essential terms to facilitate the communication among users of a language and teaching professionals in the Common European Framework of Reference for Languages (CEFR). To begin with, competences as are the sum of knowledge, skills and characteristics or personal resources that allow a person to perform actions. General competences are those not specific to language, but which are called upon for actions of all kinds, including language activities, which include:

- a) Declarative knowledge (savoir): knowledge of the world (which derives from experience, education or from information sources, etc.), sociocultural knowledge, and intercultural awareness.
- b) Skills and know-how (savoir-faire): everything that has to do more with the ability to carry out procedures than on declarative knowledge. This skill may be facilitated by the acquisition of 'forgettable' knowledge and be accompanied by forms of existential competence (for example relaxed attitude or tension in carrying out a task). It comprises practical skills and know-how (social, living, leisure, and occupational skills) as well as intercultural skills and know-how.
- c) 'Existencial' competence (savoir-être): it may be considered as the sum of the individual characteristics, personality traits and attitudes which concern, for example, self-image and one's view of others and willingness to engage with other people in social interaction. Attitudes and personality factors greatly affect not only the language users'/learners' roles in communicative acts but also their ability to learn. It consists of attitudes, motivations, values, beliefs, cognitive styles, and personality factors. This type of competence is not seen simply as resulting from immutable personality characteristics. It includes factors which are the product of various kinds of acculturation and may be modified.
- d) Ability to learn (savoir-apprendre): it mobilizes existential competence, declarative knowledge and skills, and draws on various types of competence. Ability to learn may also be conceived as 'knowing how, or being disposed, to discover *otherness*' – whether the other is another language, another culture, other people or new areas of knowledge.

Communicative language competences are next defined as those which empower a person to act using specifically linguistic means. The language activity required to perform communicative acts always occurs in a context that imposes conditions and constraints of many different kinds (also called domains of language use: public, personal, educational and occupational). Thus, for communicative intentions, users/learners of a language bring to bear their general capacities as detailed above together with a more specifically language-related communicative competence. Communicative competence in this narrower

sense has the following components: linguistic, sociolinguistic and pragmatic. Each of these components is postulated as comprising, in particular, knowledge and skills and know-how.

a) *Linguistic competences:* include lexical, phonological, syntactical knowledge and skills and other dimensions of language as a system, independently of the sociolinguistic value of its variations and the pragmatic functions of its realizations.

b) *Sociolinguistic competences:* refer to the sociocultural conditions of language use. Through its sensitivity to social conventions (rules of politeness, norms governing relations between generations, sexes, classes and social groups, linguistic codification of certain fundamental rituals in the functioning of a community), the sociolinguistic component strictly affects all language communication between representatives of different cultures, even though participants may often be unaware of its influence.

c) *Pragmatic competences:* are concerned with the functional use of linguistic resources (production of language functions, speech acts), drawing on scenarios or scripts of interactional exchanges. It also concerns the mastery of discourse, cohesion and coherence, the identification of text types and forms, irony, and parody. For this component even more than the linguistic component, it is hardly necessary to stress the major impact of interactions and cultural environments in which such abilities are constructed. The resulting outcome of the Council of Europe was a very comprehensive work that describes the competences necessary for communication, the related knowledge and skills and the situations and domains of communication. Communicative acts comprise language activity, which is divided into four kinds: reception, production, interaction and mediation. Reception entails understanding language produced by others, whether in speech or in writing, while production entails producing speech or writing. Interaction refers to spoken or written exchanges between two or more individuals, while mediation (often involving translation or interpretation) makes communication and mediation involve both reception and production. While learning EFL for general purposes, all language activities are stressed, but when focusing on developing business competences, interaction becomes an essential aim.

The b2 Language Portfolio According to Zubizarreta (2009), a learning portfolio is a flexible, evidencebased process that combines reflection and documentation. It engages students in ongoing, reflective, and collaborative analysis of learning. It also focuses on purposeful, selective outcomes for both improving and assessing learning. The B2 Language Portfolio was designed in 2011 to meet the needs of students of English as a Foreign Language (EFL) at the Language Department at Universidad Michoacana de San Nicolás de Hidalgo (UMSNH) in the capital city campus, Morelia. It was based on the model launched in 2000 by the European Language Portfolio (ELP) and it conforms to the Principles and Guidelines defined by the Council of Europe that same year. It was designed as a tool to make sure that at the end of their studies, the Language Department students reach the B2 level of proficiency in English, according to the Common European Framework of Reference for Languages (CEFR). Although there is a general template for learning portfolios (Zubizarreta, 2009) we decided to base ours on the model proposed by the Council of Europe (2004), since it has been specifically designed for languages by an international group of experts. The Council of Europe developed the ELP in order to serve two complementary functions.

The first is pedagogical: the ELP is designed to make the language learning process more transparent to learners and to foster the development of learner autonomy; that is why it assigns a central role to reflection and self-assessment. This function reflects the Council of Europe's long-established commitment to learner autonomy as an essential part of education for democratic citizenship and a prerequisite for lifelong learning. The second function is to provide concrete evidence of second/foreign language communicative proficiency and intercultural experience. In addition the ELP is intended to promote the development of plurilingualism, the ability to communicate in two or more languages besides one's first language. The European Language Portfolio (ELP) has three obligatory components: a Language Passport, a Language Biography, and a Dossier. The B2 Language Portfolio designed at the

Language Department adds a list of suggested activities in the Dossier section and a comprehensive list of websites for learning English. This was done in order to accompany the students while they develop both communicative competence and learner autonomy.

## METHODOLOGY

This paper proposes that university business/management students use a Portfolio similar to the B2 Language Portfolio, the Business Competences Portfolio (BCP). The BCP uses English as a means to introduce both teachers and students to competence-based work. Thus, students have the chance to improve their linguistic proficiency in English while learning and developing business competences, which at present are left aside in the formal curriculum. At the UMSNH's undergraduate program, it is currently left to the teacher to decide whether to include the development of business competences in the course contents, assuming he or she knows how to do it or is interested in doing it. On the other hand, many of our students are still very dependent on their teachers. Using a learning portfolio fosters both learner autonomy and the use of self-assessment (Little, D. & Perclová, R., 2003, 2007; Zubizarreta, J., 2009; Chen, H. & Black, T, 2011; Dobrow, S., Smith, W. & Posner, M., 2011), which are also core objectives of this project. Successful students assume the responsibility of their own learning and are willing to expand it to other subjects of interest as a lifelong activity. Furthermore, Daniels (2010) reports that Human Resources managers find that, in general, being proficient in a foreign/second language adds professional and personal value to employees.

The Business Competences Portfolio (BCP) is to be piloted at the Universidad Michoacana (UMSNH)'s Faculty of Administration and Accounting, with two testing groups and two control groups. One control group and its correspondent testing group will be freshmen who are basic users of English (A1 level of the CEFR); and the other two groups will be students who are independent users of the language (B1+ level). The study will also aim to find if students who attend more advanced courses in the Faculty of Administration and Accounting (the ones who are also more likely to have a higher level of proficiency in English) have indeed learned more business schools than freshmen. The BCP is currently being developed by Faculty staff and is intended to be piloted during the spring semester 2013.

### **EXPECTED RESULTS**

Based on the literature review done so far and our own experience, the authors expect to find the following: a) if there is a correlation between the students' level of achievement in developing communicative competence and business competences; b) what business competences our students are best at and which ones need to be reinforced; c) the students' feelings about motivation when they play a more active role directing their learning process; d) whether students' attitudes towards evaluation change; e) what aspects of the portfolio need to be improved or replaced; f) how much interest the tool raises among faculty teachers and students, and if it does not dimish once enthusiasm for novelty fades; g) set the basis for launching the definite version of an ePortfolio; and h) whether the students' intercultural competence improves, since Michoacan is home to the P'urepecha, one of the many native people striving to survive in Mexico, and if the BCP promotes awareness of a foreign culture while reinforcing our local identity.

### CONCLUSIONS

Language is one of the foundations of human behavior: we use it continuously to perform communicative acts. Those acts may be external and social. In business settings, apart from holding conversations with colleagues, we are expected to hold formal meetings, make speeches or give lectures, write personal and official letters and of course extend knowledge in our domain of expertise. Communicative acts may also be internal and private. All forms of reading and some forms of listening are examples of this; so too are

the many different ways in which we use language for purposes of thinking things through – for example, to plan the apology we have to make for absence from an important business meeting, or to prepare ourselves for a difficult interview by trying to anticipate the questions we shall be asked and working out what our answers should be. Productive activities have an important function in many academic and professional fields (oral presentations, written studies and reports) and particular social value is attached to them (judgments made of what has been submitted in writing or of fluency in speaking and delivering oral presentations). By providing university students with a Business Competence Portfolio, the authors expect to help them not only develop communicative competence in English, but to help them build the key competences they will need to set up a successful career.

A competence-based approach implies that learners practice on how to do business in English, recognizing that people need more than just phrase lists and useful language boxes to operate effectively in real-life business situations. Personal and professional competences provide a framework to manage organizational culture, core competency management, leadership development, and drive organizational performance and become the greatest determinants of employee performance, assuming the individual possesses the required threshold of technical competencies.

Finally, Graddol (2006) states that it is time for a change in the teaching/learning paradigm, and that by using English for global communication (English as a Lingua Franca, ELF) we focus on pragmatic strategies required in intercultural communication, the second main objective of the Language Portfolio. The target model of English, within this framework, is not a native speaker but a fluent bilingual speaker, who retains a national identity in terms of accent, and who also has the special skills required to negotiate understanding with another non-native speaker. Research is also beginning to show how bad some native speakers are at using English for international communication. He suggests that elements of an ELF syllabus could usefully be taught within a mother tongue curriculum. We look forward to integrating such intercultural awareness through English, as a complement to the curriculum in Spanish.

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# ORGANIZATION DESIGN AND PERFORMANCE: A STUDY OF SELECTED INDIAN ORGANIZATIONS IN THE LIBERALIZED ECONOMY

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# ABSTRACT

The exhaustive research on organization design, its transformation, change management, organizational restructuring for the last two decades makes it a challenging and complex research issue. The central problem is to design the organizations for superior performance on the basis of redesign mechanisms such as uncertainty, differentiation and integration. The design-performance relationship is also dependent on the business environment as well as the sector of the specific business environment. In the backdrop of the ongoing economic liberalization in India, the specified sector that includes Chemical; Petro-chemical Process Industry; Agricultural related Industry; Processed Food Industry; Bio-Chemical related Industry was undertaken for research. It is important to understand the measures of organization design parameters such as measures of uncertainty, differentiation and integration in relation to those of competitive organizations and the impact of the relative redesign mechanisms on the performance of the mathematical functional form for establishing the functional relationship between organization design parameters and performance. It is also intended to examine the differences across the groups in respect of the strength of the influence of the design parameters and the organizational performance and also the nature of relationship among the variables considered in the model.

**JEL:** D23

KEYWORDS: Organization design, Performance, India, Chemical sector

# **INTRODUCTION**

Organizations, in general, are complex. They are economic entities as they have to acquire various human, financial, material and managerial resources. Now, they have to allocate the resources in such a way that utilization of resources has been made in an efficient and effective way. Organization, as a social system, has to interact with external entities constantly. Besides that, organizations have internal system and process which have specific norms and rules, ideals, values, beliefs and practices that govern their behavior. Within the organizations, people interact daily and also they have specific skills, values, feelings, motivation and feelings. All the organizations have to maintain their external and internal consistency for their growth, sustenance and development.

Given organizational complexity, designing and managing effectively any sizeable organization anywhere is a daunting task (Khandwalla, 1992). It is much more difficult in the Third World Countries. The main reasons are many, such as operating environment, shortages of resources, political and bureaucratic interference, and lack of social and physical infrastructural facilities etc. Within these constraints, the achievement of organizational excellence requires specific strategies. The strategic choices also depend on nature of organizations, size of organizations and also on its operating environment. The discussion of organization and its excellence, in this research paper, has specific context. Liberalization of the Indian economy for the last two decades makes it highly dynamic and complex. During the past two decades, India has been moving from an insular, command and planning oriented economy towards an increasingly liberalized, globalized, and market oriented economy (Ray, 2004). India becomes one of the largest emerging markets with a huge potential for sustained economic growth. Attempt has been made in this research study to establish the organization design –performance relationship for a specific sector in the context of liberalized Indian Economy.

## LITERATURE SURVEY

#### Organization

A complex organization is an open social action system consisting of multi-forms of structures and processes. The cyclic repetitive process converts input resources to value added output resources by definite methods/measures. The value of the product/service depends on mainly two facts:

- a) Development of the structured process with specified predictable pattern is concerned with the organization design which should minimize the variability of the output level
- b) The assessment of the environment in which they operate, determines the strategic choices to be made, considering that those strategies must "fit" the specific environment. So the process should be configured properly to cope with the different environment (Andrew H. van de Ven, 1976).

To address the first issue we have to define organization in its design perspective: "An organization is defined as a system of interrelated behavior of people who are performing a task that has been differentiated in to several distinct subsystems, each subsystem performing a portion of task, and the efforts of each being integrated to achieve effective performance of the system." (Lawrence and Lorsch, 1967). The second issue indicates the compatibility of organization design with the environment: "In varying degrees all organizations are dependent upon their environment for survival. The environment is defined as the organizations and associates in the factor markets that supply an organization with its input resources and the organization. Uncertainty in the environment in every aspect of situation considers internal and external as well as social, economic and environmental factors etc." (Andrew H. van de Ven, 1976).

#### Organization Design Perspectives

Organization design research must compare the efficacy of organizational structures and developmental processes, and organization designers must create methods for implementing effective structures and processes. Organization design has been a central topic in the management research. The continuous research indicates that organization design is a dynamic culture and the objective is to develop an effective organization but that is both time and environment specific. Completeness of the design can only be possible by the pre-specification of the problem, the identification of pre-fixed alternatives and choosing of the best alternatives. For such a scientific approach, there needs to be a clear and stable boundary between the organization being designed and the context for which it is being designed.

## Organization Re-Design

In case the organizations remain static in respect of design parameters they do not become competitive with the changing environment. The challenge of the organization redesign is to shift the organization from their stable state of equilibrium and to make it more dynamic in the future point of view. It is more so in the era of liberalized economic system. Over the last four decade there has been a wide range of

research considering change management, organizational restructuring, organizational transformation etc. This literature started with advent of the work of Burns and Stalker(1961), Chandler(1962), Lawrence and Lorsch(1967), Pugh et al.(1968), Galbraith(1973), Khandwalla(1973), Mintzberg(1979), Miller and Friesen(1984), Miller(1986,1987,1996), Scott (1995) and more recently in the special issue of Organization Design in Organizational Science (Dunbar and Starbuck,2006).

Dunbar and Starbuck's (2006) question is closely related to a central research objective of organization theory concerning the design of organization for effectiveness and performance. Two contrasting ideas have been developed to nurture the issues. Contingency model (Lawrence and Lorsch, 1967; Khandwalla, 1977) implicitly assume that high-level performer within an organization are able to point out the constraints imposed by the environment and are able to design the organizations in an appropriate way to address those issues. The role of top management /strategist of an organization are, therefore, to respond to the changing environment in a continuous manner by adapting the necessary changes in the organization (Andrew H. van de Ven, 1976).

The second theme uses a congruence model of organizational design (Randolph and Dess, 1984; Nadler & Tushman, 1997; Russo and Harrison, 2005) to study how internal process influence organizational performance. The research attention has focused on what components to include in designs and how to evaluate design performance. The assumption is that if a design includes the appropriate components, if the relationships between these components are logically consistent, and if they are congruent with organization goals, then the design will perform well. The main emphasis has been given to "alignment" of the design component that should be deemed "fit" for organizational performance and the greater the "congruence", the higher is the performance of the organization. Over time, organization design research has made progress by becoming more specific in identifying the components to be aligned, more detailed in identifying the criteria for evaluating fits, and broader in terms of the range of rigorous research methodologies used to explore ideas about fit. As a consequence, discussions of organization design have grown more complex (Dunbar and Starbuck, 2006).

Hence, the dynamism of the organization redesign makes the field much attractive towards organization theorists. There are wide scopes to revisit the organization redesign and theorise the concept from different perspective. To summarize, Nystorm and Starbuck (1981) captured the idea perfectly when they said: "a well-designed organization is not a stable solution to achieve, but a developmental process to keep active." The work of Lawrence and Lorsch (1967) suggests that differentiation and integration are two major elements of organizational design. To cope more effectively with the diverse contingencies in their task environment, they must differentiate themselves more efficiently and at the same time strive to coordinate their activities by integrating their operations. Thus, we expect that the more the organization has been able to achieve a closure (the greater the reduction in uncertainty it has been able to effect and the clearer the identification it has been able to make of the crucial contingencies in its environment), the more capable it will be of differentiation, and the more differentiated it is, the more it will strive to use integrative mechanisms (Khandwalla, 1973).

It is necessary to understand the state of differentiation in relation to the properties of environment but we have also understand the relationship between two design mechanism, differentiation and integration in complex organization and ultimately how these are related to organizational performance.

## Determinants of Organizational Performance

Performance is the ultimate criterion in the assessment of organizations. Performance measurement is a complex construct as number of factors identified by the decisions makers to assess it. A dynamic model has been developed by R.T.Lenz (1981) to portray the relationship between environment, organization design and performance. Based on the task environment that specified the required output utilizing the

indicated input, firm develop the internal consistency such as division of task, interdependence of the department etc in such a way that it would provide the optimum level of performance in that specified firm sector. The measurement is also time specific. It would be better to strategize in such a way that the process of co-alignment can occur i.e. successful adaptation of environmental change and leads the organization for sustainable development path.

#### **RESEARCH OBJECTIVES**

This research study explains the concept of effective firm design/redesign in the Indian context focusing on Chemical; Petro-chemical Process Industry; Agricultural related Industry; Processed Food Industry; Bio-Chemical related Industry. The following issues will be addressed in this research paper: It is important to understand the measures of organization design parameters such as measures of uncertainty, differentiation and integration in relation to those of competitive organizations and the impact of the relative redesign mechanisms on the performance of the organizations. This impact of the organization design parameters on the performance can not be reflected in one mathematical functional form because of the heterogeneity nature of the context in which the organizations operate. Therefore, the first objective is to identify the homogeneous groups. The second objective is to estimate the functional relationship between the design parameters and the organizational performance in case of individual segment of the mentioned sector and also to ascertain the nature of relationship. It is also intended to examine the differences across the segments in respect of the strength of the influence of the design parameters and the organizational performance and also the nature of relationship among the variables considered in the model.

#### **RESEARCH METHODOLOGY**

#### Data

The unit of observation for this study includes the Chemical; Petro-chemical Process Industry; Agricultural related Industry; Processed Food Industry; Bio-Chemical related Industry. The selection of the firms of the specified sector are basically made by the exhaustive study of the Print version of Economic Intelligence Service named Industry Market Size & Shares published by Centre for Monitoring Indian Economy Private Ltd(CMIE). Attempt has been made to cover all the chemical & chemical related industries in the Eastern Region of India. All total 68 organizations of this sector were participated in this study. The top management of those selected organizations was contacted through telephone or email and was requested to provide the appointment stating the objectives of the research. A structured questionnaire has developed based on the model of Prof P N Khandwalla (2001) and Prof A Som(2002). Personal interviews has been made with structured questionnaire with more that one senior executives who had an adequate knowledge of company's history , business strategy, changes in the business environment and the changes with the organization to discuss over the questionnaire and get his/her perception. The final section of the questionnaire contains the tools to measure the performance of the organization. The databases of CMIE of the detailed performance report of the firms are used as the source of performance data of the respective organizations.

### Model

Organization design mechanisms are taken as independent variables. From the structured questionnaire, the perception of the respondents on the three redesign mechanism are taken (No. of respondent=175). All the respondents are asked to provide the level of uncertainty for their organizations (it has been indicated as ur12s in the dataset) as well as their close competitor (it has been indicated as ur12c in the dataset) in the rating scale. The ratio of these two values is indicated as relative uncertainty (RUR) and that measure is taken as one of the independent variables. Similarly, all the respondents also indicate the

level of differentiation for their organizations (it has been indicated as dr10s) as well as their close competitor (it has been indicated as 10c in the dataset) in the rating scale. The ratios of the two values in both the cases are named as relative differentiation (RDR). All the respondents are asked to provide the level of integration for their organizations (it has been indicated as ir10s in the dataset) as well as their close competitor (it has been indicated as ir10c in the dataset) in the rating scale and the ratio of these two values is indicated as relative integration (RIR). The relative measures of three design variables (RUR, RDR, RIR) are taken as independent variables to measure the organizational performance. The sales turnover and capital employed ratio of each organization is taken as performance measures and that is indicated as TRNCAPE in the dataset. That value is taken as dependent variable.

### ANALYSIS

#### Analysis -Stage I

The objectives of the section are stated as follows:

- Formation of the two clusters based on design parameters, RUR, RDR and RIR and based on these two clusters, the discriminant function has to be estimated. Finally, the discriminant score has been obtained through this.
- In this way, the functional relationship between performance and three design parameters is modeled in terms of performance parameters and the discriminant scores reflecting the effect of three design parameters. And, hence the situations can be shown in the two dimensional space, one dimension being performance measures (TRNCAPE) and the other discriminant scores.

The scatter diagram is subjectively categorized into three segments on the basis of TRNCAPE & the discriminant scores. After having segmentation, attempt has been made to estimate the relationship between the performance measures of the organization with the organization design mechanism. These three categories of industries are formed subjectively so as to estimate consistent regression equation

### Analysis- Stage II

The three categories of industries are formed subjectively based on the scatter diagram. Now the objectives of the section are as follows:

- The three groups are distinct in respect of the parameter such as sales turnover and capital employed ratio (TRNCAPE), Profit after Tax (PAT) etc. The value of TRNCAPE is greatest in the case of Group III, followed by the value in Group II, and it is the least in the case of Group I. The same trend is observed for the other key financial parameter, PAT, also.
- Regression analysis has been performed directly considering financial performance turnover/Avg. Capital Employed [TRNCAPE] as dependent variable and the three design parameters relative uncertainty (RUR), relative differentiation (RDR) and relative integration (RIR) as independent variables. In this case, the problems of multicollinearity emerge.
- To get rid of this, factor analysis is performed and the regression analysis is performed based on three factors F1, F2 and F3.

### Development Of The Model

Regression analysis has been performed to analyze associative relationship between a dependent variable (TRNCAPE) and three Factor Scores that are completely represents the redesign variables RUR, RDR and RIR. The summarized results are given in the following table (ref Table I).

Table I: Summarized Results of Coefficients of Factor Score and Group

	Case I [Group I]	Case II [Group II]	Case III [Group III]
Constant	1.230	2.170	3.907
Regression Factor Score 1[F <sub>1</sub> ]	-0.153	-0.513*	-1.286*
0	(0.092)	(0.118)	(0.303)
Regression Factor Score 2[F <sub>2</sub> ]	0.175	0.471*	0.595
	( 0.092)	(0.118)	(0.303)
Regression Factor Score 3[F <sub>3</sub> ]	0.453 *	-0.04	0.795*
•	( 0.092)	(0.118)	(0.303)
R Square Value	0.837	0.762	0.742

The figures in the brackets indicate the standard error value. \* Statistically significant

Mathematical Model of Group I

 $TRNCAPE = \beta_0 + \beta_3 F_3 - \dots$  (I)

From the output, the above equation can be written as:

TRNCAPE=  $1.230 + 0.453 F_3$ ------ (I A)

TRANCAPE= 1.230+ 0.453 F<sub>3</sub>

TRANCAPE= 1.230 + 0.453(1.66x RUR-1.412xRDR+4.865xRIR-5.41)

TRNCAPE= [-1.22+0.75xRUR-0.639xRDR+2.20xRIR] ------ (II)

6.3 Mathematical Model of Group II

 $TRNCAPE = \beta_0 + \beta_1 F_1 + \beta_2 F_2 \quad ----- \quad (III)$ 

From the output, the equation (IV) can be written as:

TRNCAPE= 2.170+(-0.513) F<sub>1</sub> + (0.471) F<sub>2</sub> ------ (IIIA)

TRNCAPE= 2.170+ (-0.513) x [3.42 x RUR- 0.029 x RDR + 1.393 xRIR-5.289] + (0.471) x [-0.0415x

RUR+2.462x RDR – 1.369xRIR-1.2317]

TRNCAPE= [4.303-1.769xRUR+1.174xRDR-1.359xRIR] ------ (IV)

Mathematical Model of Group III

The equation of the regression model becomes:

 $TRNCAPE = \beta_0 + \beta_1 F_1 + \beta_3 F_3 \dots (V)$ 

From the output, the equation (VII) can be written as:

TRNCAPE=  $3.907 + (-1.286) F_1 + (0.795) F_3$  ------ (VA)

TRNCAPE= 3.907+ (-1.286) [1.754 x RUR + 0.61x RDR + 1.11 x RIR- 4.154] + (0.795) [0.436 x RUR - 1.846 x RDR + 6.15 x RIR- 4.882]

TRNCAPE= 5.368-1.908 x RUR-2.251x RDR + 3.463 x RIR ------ (VI)

### CONCLUSIONS

The results of the regression model for three groups are summarized as follows (ref Table II) for detailed analysis of the impact of design parameters on the performance of the organizations.

Table II: Representation of results of Regression Analysis

	Group I	Group II	Group III
No of Organization	10	15	14
No of Respondents	25	37	54
R Value	0.814	0.871	0.802
R-Square Value	0.663	0.759	0.643
Constant	-1.22	4.303	5.368
Coefficient of Uncertainty(RUR)	0.75	-1.769	-1.908
Coefficient of Differentiation (RDR)	-0.639	1.174	-2.251
Coefficient of Integration (RIR)	2.20	-1.359	3.463

The above discussion clearly indicates that all the redesign variables such as relative measures of uncertainty, relative measures of differentiation and integration have an impact on organizational performance and R-square value of these three cases are significantly high. The relationship between organizational performance and design mechanisms has been established. The specific sector has confronted with significant pressures of liberalization and the organizations have to redesign their organization structure to be fit in the changed market environment. The differentiation mechanism proves to be important parameter to explain the performance of the organization. The integration mechanism also becomes the key parameter to influence the performance of the organization.

The organizations are subjectively segmented into three groups and the redesign mechanisms such as RUR, RDR & RIR has an impact on organizational performance. The regression equation that has developed in the three cases has the coefficients to indicate the extent of correlation with the dependent variables with independent variables. The coefficient values of design parameters are indicative of the impact of design mechanisms on the performance of the organizations of the respective sector. The results of regression analysis indicate that the degrees of importance of the design mechanisms on the performance of the three sectors are quite different. It is quite interesting that organizations of these three sectors have to face the business environment quite differently. Their restructuring mechanisms also vary from one sector to another. So, those three groups have to formulate the three redesign strategies in different ways for superior performance. The detailed discussion has been made in the next section to explain the importance of the design mechanisms on the organizations of the importance of the design mechanisms of the three individual groups separately.

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# CORPORATE CHIT FUND: AN ALTERNATIVE SHORT TERM FUNDING SOURCE FOR MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs)

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## ABSTRACT

Short-term funding is one of the key areas for a company to meet liquidity and survival issues which needs instant money without any tedious documentation and other processes. Chit fund is one of the Indian financial engineering products which fulfilled the short-term borrowing and investing needs of individuals and small enterprises which also has the potential to serve corporate working capital requirements and parking idle funds. Being a successful and innovative tool for short term investing and borrowing requirements it failed to receive the attention of academic fraternity, commercial enterprises and finance houses to make it applicable in the corporate world. This paper looks into costs, benefits and valuations aspects of chit fund to know the feasibility of chit fund in the corporate world.

JEL CODE: G 20, G23, G 32.

KEY WORDS: Auction, Bidding, Cost of Bidding, Dividend

# **INTRODUCTION**

It is similar to a mutual benefit schemes or a kitty party. It is also known as chitty, cheety, kuri and boli. It can be defined as a series of financial transactions for mutual benefit of organized members through the status of "association of persons" with and an agreement between each member of the fund and the foreman who is the initiator, organizer and caretaker of the fund. Chit fund is organized with foreman as the key person in initiating, operating and settlement of funds for every month. It has a limited number of members or subscribers including foreman. The chit fund exists for a period of time usually in multiple of months. In terms of its objectives and association it is similar to Rotating Savings and Credit Association (ROSCA) in USA and other countries.

It is the most ancient system of lending and borrowing needs even before banking. It is as old as agriculture in India which originated as self-help among small farmers with grains. After the development of banking system chit fund lost its identity as lending and borrowing tool. Modern chit fund had unique influence in south India as an alternative savings tool known to every house hold. The turnover of chit funds in India in 1986 was Rs 81.6 billion and it grew for the later decades. 'Model Chit Fund' was the first company to launch one crore rupees chit fund for companies for their short term funding.

### Theory And Practices Of Chit Fund Bidding

The chit fund has 'n' members making 'n' months for the chit fund, which means the number of members result in number of months. Chit amount, duration and number of members are pre-determined. Once the target number of members is met, the chit fund gets started. For 'n' months all 'n' members compete to take the chit value through bidding 'b' except for the last month as only one member would be left. Chit members meet every month on a date and day mentioned by the organizers for all the months. One of the members would be eligible to take the chit amount every month through bidding. Auction would be invited from all the members to take the chit fund. The auction is for the discount amount on the chit fund. Whoever bids highest for the discount amount he/she would be awarded with the net chit value (NCV). The auction sets the platform and competition to lose more. The probability of an option varies

from 1/n in the first month to 1/(n-i) in the (n-i) month where i is the number of month of auction. The successful bidder cannot participate in the later auctions. Bid amount is to a minimum of 5% and maximum is decided based on the nature of members and demand for the chit fund which may range from 30% to 40% of the chit value. In case there is more than one member willing to bid for more than cap percentage, lots are drawn for all the interested members willing to take nearest month chit fund. The bid amount would be high in the initial months and low in the last months. All members have a common objective to maximize dividend if not participating in bidding or minimize the bid if participating in bidding. The bid value 'b' is distributed to all 'n' members equally (b/n). But the distribution of the bid is net of commission 'c' taken by the organizer or chit fund company (b-c) making the net distribution as (bc)/n. The subscribers or members have to pay the subscription amount less he the discount amount equated to all the members. Corporate Chit fund is basically borrowers oriented and designed to meet corporate borrowers' requirements. Borrowers are the members who are in desperate need for funds in a specific month and are willing to take higher cost of borrowing. Chit fund is more relevant and important source of funding for Micro, Small and Medium Enterprises (MSMEs) due to the fact that all banks doesn't give easy loans to MSMEs as they don't have good track record and proper accounting system. Borrowers would get full amount of the chit after bidding without any deductions or charges.

Most of the MSMEs rely on bank credit or hand loans for their short term capital requirements which consume more processing time at high cost of capital due to the urgency of for capital needs which arises without any notice demanding the firms to raise funds within few weeks or a month. Chit fund provides a wonderful opportunity for MSMEs to take the benefit of instant and easy access to short term funds. Most of the MSMEs find difficulty in finding the lender as there is always a scope for mismatch between the lender principles and borrower's needs. Corporate chit fund will be a potential alternative to short-term loans taken by MSMEs from Commercial banks and Non Banking Financial Company (NBFC). The cost of borrowing and time consumed to process a single loan is tedious which may hit the business operations sometimes it effects survival of the business. Compared to other traditional borrowings chit funds have low cost of borrowing, flexible monthly payments and choice of borrowing or remain invested. In India First enactment on chit fund was made before independence in 1914 by government of Travancore. Andhra Pradesh was the first state after independence to pass an act on chit fund in 1973 followed by Karnataka in 1984. Currently all the chit funds are regulated directly by Registrar Chits in respective states. Central government introduced an act on chit fund in 1982. In addition to governments acts chit fund also comes under 'Transfer of Properties Act' Sec 69.

Chit funds are also regulated by RBI as they come under NBFC category of RBI. Joint Registrar of Chits (JRC) is a statutory body to control chit fund companies and safeguard the interests of the subscribers of the chit fund. The company should have commencement certificate from JRC to start a group. Chit operator has to file regular returns with JRC. For each fund the chit fund company has to deposit Fixed Deposit Receipt (FDR) with a bank favoring JRC as security which can be withdrawn after the closure of the particular chit fund of the company. In case the chit operator bankrupts all the FDRs and immovable properties of the chit fund according to the chit fund act.

## LITERATURE REVIEW

As interpreted by Simon Rottenberg (1968), the methods to arrive at bid value and the factors influencing the bid value depends on chit members' capacity to distinguish the relative values of different outcomes. These differentiating values and outcomes influence the cost of bidding. Besley Timothy, Stephen Coate and Glenn Loury (2002) provided inputs on the value of chit fund in terms of bidding and borrowing lies between need for short term funding and choice to remain till the last month of the chit tenure which has pure economic sense which drives the members to compete in bidding.

In the working paper of Preethi Rao (2007) it was evident that the chit fund is serving all the classes of borrowers including individuals and small scale enterprises fulfilling personal and business needs. Chit fund industry needs stringent regulation on unorganized sector to transform them to organized sector. Tight regulation on unorganized sector is beneficial to government in generating revenues and also ensures safety and security to all the members. Government should be liberal with organized chit fund industry which contributes to the growth of the industry and pulls more variety of borrowers including companies.

## DATA & METHODOLOGY

To arrive at cost of bidding of SMSE's chit fund and other issues related to a chit fund, six chit funds of three different chit fund companies were considered which had tenure of twenty five months and fifty months. To exemplify the method of calculation one of the chit funds with following details in Table 1 is chosen. The chit fund started in September 2007 and ended in the month of October 2011 for fifty months. Considering the exchange rate of Rs 50 per US Dollar the rupee value is converted into US Dollar value.

Table 1: Chit fund details

Chit Fund Company	Margadarsi Chit Fund Limited.
Subscriber	Medium Scale Enterprise
Chit Value	Rs 2,500,000 / USD 50,000
Gross Monthly Installment (GMI)	Rs 50,000 / USD 1,000
Bid Cap	35%
Bid Cap Months	10 Months
Method of Bidding	Auction
Auction Day	2 <sup>nd</sup> Sunday of every month.
Commission	5% of the chit value (Rs 125,000 / USD 2,500).

This table provides all the details of a chit fund needed for data analysis. The members or the subscribers of Margadarsi Chit Fund, Vishakhapatnam, India are the sources of data. They provided monthly statements as well as consolidated sheet of the chit fund at the end of the fund's term for the purpose of data analysis.

To have a comparison of cost of bidding and cost of borrowing for MSMEs from commercial banks, the reportates of Reserve Bank of India (RBI) for the period matching with chit fund tenure are taken.

#### **Bid Value Determination**

The amount of bidding is based on the firms need for capital requirements and accordingly expected cost of bidding. The discounted value (present value) of the chit fund for the remaining number of months with a given cost of bidding should be the criteria to go for bidding which may differ from member to member and month to month. Following is the equation depicting cut-off for bidding.

```
\begin{array}{l} Bid\ Price \cong Chit\ Value - Net\ Chit\ Value\\ Net\ Chit\ Value \ge Present\ Value\ of\ the\ Chit\ Fund\\ NCV \ge PV_{CF}\\ NCV = Chit\ Value - Bid\ Price \end{array} \tag{1}
```

*Bidding Price Calculation:* To arrive at cost of bidding for every month, the IRR approach is used. It equates Net Chit Value  $(NCV_n)$  at the end of chit term i.e. Rs 2,375,000 with compounded  $(NCV_i)$  for a month using the following equation.

$$NCV_n = NCV_i(1+k)^{n-i}$$
<sup>(2)</sup>

Rs 2,375,000 =  $NCV_i$  This model is useful for bidders to arrive at required rate of return and target bid amount before participating in auction. The model to arrive at cost of bidding in this study helps the existing chit members of a chit fund to know the expected cost of bidding for a given NCV and target bid amount. It also helps to make a decision on choice of chit fund and traditional alternatives for short term funding based on historic cost of bidding calculations.

*Dividend Calculation:* Bid value which is net of commission to the company is equally distributed to all the member for the respective months is termed as dividend

$$Dividend = \frac{Bid \, Value - Commission}{Total \, Number \, of \, Members} = \frac{Net \, Bid \, Value}{Total \, Number \, of \, Members} = \frac{NBV}{n}$$
(3)

*UMI Calculation:* Unequaled Monthly Installment (UMI) is the net of gross monthly installment (GMI) and dividend. UMI is calculated after deducting the dividend from GMI represented in the following equation.

$$UMI = GMI - Dividend \tag{4}$$

As an alternative to equation (1), the dividend can be calculated as the net of GMI and Unequaled Monthly Installment (UMI) which can be expressed as

$$Dividend = GMI - UMI$$

## <u>Umi Irr</u>

To have a fair idea on monthly change in dividend, monthly IRR is calculated by equating Rs 50,000 with compounded value of UMI for a given month using the following equation.

$$GMI = UMI_i(1+k)^{n-i}$$
<sup>(5)</sup>

 $Rs 50,000 = UMI(1 + k)^{n-i}$  Return on chit fund to an investor is calculated by using Internal Rate of Return (IRR) approach which equates the compounded value of all UMIs to net chit value ( $NCV_n$ ) to be received at the end of the chit term. The equation is stated as follows

$$NCV_{n} = \sum_{i=1}^{n} UMI_{i}(1+k)^{i}$$
(6)

The sum of compounded value of all individual UMIs is equated to the Net Chit Value ( $NCV_n$ ) at the end of chit term i.e. Rs 2,375,000 (Rs 125,000 commissions is deducted from chit value). We substitute Rs 2,375,000 for  $NCV_n$  in equation (3) to get UMI IRR as follows.

Rs 2,375,000 = 
$$\sum_{i=1}^{n} UMI_{i}(1+k)^{i}$$

### **RESULTS AND DISCUSSIONS**

The results of the analysis of the data are presented in Table 2. The results show monthly bid amount, NCV, dividend and UMI for respective months in each row represented with a month number, name and year. The cost of bidding (2) in borrowers' perspective and UMI IRR (5) in investors' perspective and are calculated for the respective months. Cost of bidding through equation (2) is the primary proposition in this model and the mean cost of bidding for all months is calculated to arrive at an indicative cost of

bidding for a chit fund which can be compared to other fund of the same chit fund company or other company. Similarly Monthly UMI IRR through equation (5) is indicative and has no significance in this model. UMI IRR through equation (6) is the significant calculation in this model.

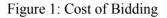
#### Cost of Bidding

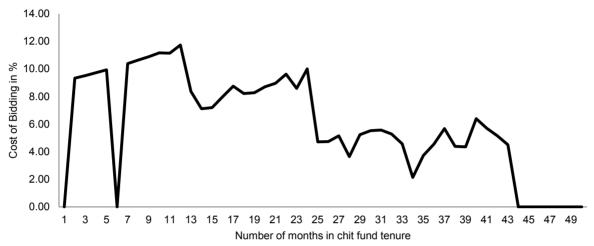
According to equation (6), equating the net chit value of Rs 2,375,000 with the sum of all fifty compounded UMIs we get an IRR of 4.31%. It means a subscriber who didn't bid for NCV in any of the fifty months and waited till the end of the fiftieth month to receive Rs 2,375,000 by paying all the UMIs got an IRR of 4.31%.

	Bid NCV		NCV	Cost of Bidding in %	Dividend	UMI	Monthly UMI IRR in
Month	Month	Amount	Equation(1	Equation( $\tilde{2}$ )	Equation(3	Equation(4)	<b>%</b>
No	& Year		)	$NCV_n = NCV_i(1+k)^{n-i}$	NBV	GMI – Dividend	Equation(5) $GMI = UMI_i(1+k)^{n-i}$
1	Sep-07	125,000	2,375,000	0.00	0	50.000	$\frac{0.00}{0.00}$
2	Oct-07	875,000	1,625,000	9.33	15,000	35,000	8.77
2 3	Nov-07	875,000	1,625,000	9.52	15,000	35,000	8.95
4	Dec-07	875,000	1,625,000	9.73	15,000	35,000	9.14
5	Jan-08	875,000	1,625,000	9.94	15,000	35,000	9.34
6	Feb-08	125,000	2,375,000	0.00	0	50,000	0.00
7	Mar-08	875,000	1,625,000	10.39	15,000	35,000	9.77
8	Apr-08	875,000	1,625,000	10.64	15,000	35,000	10.00
9	May-08	875,000	1,625,000	10.89	15,000	35,000	10.23
10	Jun-08	875,000	1,625,000	11.16	15,000	35,000	10.48
11	Jul-08	875,000	1,625,000	11.14	15,000	35,000	10.75
12	Aug-08	875,000	1,625,000	11.73	15,000	35,000	11.02
13	Sep-08	676,100	1,823,900	8.37	11,022	38,978	7.89
14	Oct-08	592,000	1,908,000	7.12	9,340	40,660	6.73
15	Nov-08	585,000	1,915,000	7.20	9,200	40,800	6.80
16	Dec-08	617,000	1,883,000	7.99	9,840	40,160	7.54
17	Jan-09	645,000	1,855,000	8.75	10,400	39,600	8.26
18	Feb-09	604,000	1,896,000	8.22	9,580	40,420	7.76
19	Mar-09	594,000	1,906,000	8.28	9,380	40,620	7.82
20	Apr-09	601,500	1,898,500	8.70	9,530	40,470	8.21
21	May-09	600,000	1,900,000	8.96	9,500	40,500	8.46
22	Jun-09	616,000	1,884,000	9.62	9,820	40,180	9.08
23	Jul-09	555,000	1,945,000	8.59	8,600	41,400	8.12
24	Aug-09	602,100	1,897,900	10.01	9,542	40,458	9.45
25	Sep-09	355,000	2,145,000	4.71	4,600	45,400	4.46
26	Oct-09	348,000	2,152,000	4.74	4,460	45,540	4.49
27	Nov-09	357,000	2,143,000	5.15	4,640	45,360	4.88
28	Dec-09	285,100	2,214,900	3.65	3,202	46,798	3.46
29	Jan-10	342,000	2,158,000	5.24	4,340	45,660	4.96
30	Feb-10	343,500	2,156,500	5.53	4,370	45,630	5.24
31	Mar-10	335,000	2,165,000	5.57	4,200	45,800	5.28
32	Apr-10	315,000	2,185,000	5.28	3,800	46,200	5.00
33	May-10	282,000	2,218,000	4.57	3,140	46,860	4.33
34	Jun-10	196,000	2,304,000	2.14	1,420	48,580	2.04
35	Jul-10	240,000	2,260,000	3.73	2,300	47,700	3.54
36	Aug-10	256,000	2,244,000	4.55	2,620	47,380	4.31
37	Sep-10	277,000	2,223,000	5.68	3,040	46,960	5.39
38	Oct-10	235,000	2,265,000	4.39	2,200	47,800	4.16
39	Nov-10	226,000	2,274,000	4.35	2,020	47,980	4.13
40	Dec-10	260,000	2,240,000	6.40	2,700	47,300	6.07
41	Jan-11	235,000	2,265,000	5.70	2,200	47,800	5.41
42	Feb-11	215,000	2,285,000	5.16	1,800	48,200	4.90
43	Mar-11	195,200	2,304,800	4.51	1,404	48,596	4.28
44	Apr-11	125,000	2,375,000	0	0	50,000	0.00
45	May-11	125,000	2,375,000	0	0	50,000	0.00
46	Jun-11	125,000	2,375,000	0	0	50,000	0.00
47	Jul-11	125,000	2,375,000	0	0	50,000	0.00
48	Aug-11	125,000	2,375,000	0	0	50,000	0.00
49	Sep-11	125,000	2,375,000	0	0	50,000	0.00
50	Oct-11	125,000	2,375,000	0	0	50,000	0.00

Mean Cost of bidding of all months = 5.95% Using equation (6) UMI IRR = 4.31% All the equations proposed from equation (1) to equations (6) are applied on the chit fund data available and interpreted in this table. Respective equation names and numbers are labeled in the column heads. Cost of bidding (equation (2)) in column 5 and UMI IRR (equation (6)) at the foot of column 8 are the important calculations in borrower and investor point of view of a chit member.

Table 2 gives the list of cost of bidding in the fifth column which is relatively higher in the initial months up to twelfth month and came down to lowest in the mid of the chit fund term. It was zero in the last five months as there are no active bidders for the NCV. The same movement is represented in the following figure 1. Zero IRR for first and fifth month indicate that the chit value is taken by the chit fund company without any bidding.





The above figure shows the movement of monthly cost of bidding for the fifty months chit fund. The cost of bidding in percentage is shown on Y axis and number of months is represented on X axis.

The cost of bidding and UMI IRR are calculated for other chit funds and tenure between September 2007 and October 2011 using the same method. The summary of results with tenure, UMI IRR and mean cost of bidding are interpreted in the following table 3. The results showed different UMI IRR and mean cost of bidding for 25 month and 50 month tenures but they are similar in the same tenure. The mean cost of bidding is approximately 6% for 50 month tenure and 4.5% for 25 month tenure.

#	Chit Fund Company	Term / Tenure in Months	UMI IRR in %	Mean Cost of Bidding in %
1	Shriram Chit Fund	50	4.24	5.79
2	Shriram Chit Fund	25	3.14	4.36
3	Margadarsi Chit Fund	50	4.31	5.95
4	Margadarsi Chit Fund	25	3.11	4.29
5	Kapil Chit Fund	50	4.39	6.12
6	Kapil Chit Fund	25	3.16	4.48

Table 3: Summary of Cost of Bidding in various chit fund companies and terms

This table shows the summary of tenure, mean cost of bidding and UMI IRR of 3 different companies with twenty five months and 50 months tenure each.

### Cost of Bidding vs Cost of Borrowing

The lending rates of commercial banks vary from one bank and they are bench marked to repo rate of Reserve Bank of India (RBI) making bank lending rates to fluctuate continually. Lending rates are well above the repo rate and are usually spread between 2% to 3%. As a mean of the given range, 2.5% is considered as the spread to arrive at commercial banks' lending rate which is referred as hypothetical cost of borrowing in Table 4. Further this cost of borrowing is compared to cost of bidding.

215

Month & Year	Cost Of Repo Hypothetical Bidding Rates Cost of borrowing		Month & Year	Cost Of Bidding	Repo Rates	Hypothetical Cost of borrowing	
Sep-07	0.00	7.75	10.25	Oct-09	4.74	4.75	7.25
Oct-07	9.33	7.75	10.25	Nov-09	5.15	4.75	7.25
Nov-07	9.52	7.75	10.25	Dec-09	3.65	4.75	7.25
Dec-07	9.73	7.75	10.25	Jan-10	5.24	4.75	7.25
Jan-08	9.94	7.75	10.25	Feb-10	5.53	4.75	7.25
Feb-08	0.00	7.75	10.25	Mar-10	5.57	5.00	7.50
Mar-08	10.39	7.75	10.25	Apr-10	5.28	5.25	7.75
Apr-08	10.64	7.75	10.25	May-10	4.57	5.25	7.75
May-08	10.89	7.75	10.25	Jun-10	2.14	5.25	7.75
Jun-08	11.16	8.00	10.50	Jul-10	3.73	5.50	8.00
Jul-08	11.14	8.50	11.00	Aug-10	4.55	5.75	8.25
Aug-08	11.73	9.00	11.50	Sep-10	5.68	6.00	8.50
Sep-08	8.37	9.00	11.50	Oct-10	4.39	6.00	8.50
Oct-08	7.12	8.00	10.50	Nov-10	4.35	6.25	8.75
Nov-08	7.20	7.50	10.00	Dec-10	6.40	6.25	8.75
Dec-08	7.99	6.50	9.00	Jan-11	5.70	6.50	9.00
Jan-09	8.75	5.50	8.00	Feb-11	5.16	6.50	9.00
Feb-09	8.22	5.50	8.00	Mar-11	4.51	6.75	9.25
Mar-09	8.28	5.00	7.50	Apr-11	0.00	6.75	9.25
Apr-09	8.70	4.75	7.25	May-11	0.00	7.25	9.75
May-09	8.96	4.75	7.25	Jun-11	0.00	7.50	10.00
Jun-09	9.62	4.75	7.25	Jul-11	0.00	8.00	10.50
Jul-09	8.59	4.75	7.25	Aug-11	0.00	8.00	10.50
Aug-09	10.01	4.75	7.25	Sep-11	0.00	8.25	10.75
Sep-09	4.71	4.75	7.25	Oct-11	0.00	8.50	11.00

Table 4: Comparison of Cost of Bidding and Cost of Borrowing

The comparison of cost of bidding and hypothetical cost of borrowing by MSMEs for 50 months is shown in this table from Sep 2007 to Oct 2011. Note that the hypothetical cost of bidding is based on RBI's repo rate.

The study showed that the cost of bidding and the cost of borrowing from commercial banks have no correlation indicating the cost of bidding is according the need for funds within the members rather than prevailing market interest rates. Following figure 1 shows the trend lines of cost of bidding and cost of borrowing with their respective volatility for fifty months.

### **CONLUDING COMMENTS**

This paper worked on analysis of costs and benefits of SMSEs chit fund when compared to the cost of borrowing from various commercial banks. Major findings from this study are that the cost of bidding is less than the cost of borrowing for all the months of the chit tenure and cost of bidding for the same period is not influenced by the prevailing lending rates of commercial banks. Chit funds can be utilized for short-borrowing options for private and public limited companies as corporate chit fund. This transformation needs transparency, tight regulation and liquidity for the existing and prospective members. Tight regulation in the lines of RBI or SEBI in India would be a boost to the corporate world in mobilizing short term funds through chit funds. Indian Corporate chit fund model can also be introduced as a new tool or as a transformation of ROSCA to corporate chit fund in USA and other countries with

further research in the respective countries to arrive at feasibility to fit into the unexplored corporate dynamics in the process of short term funding.

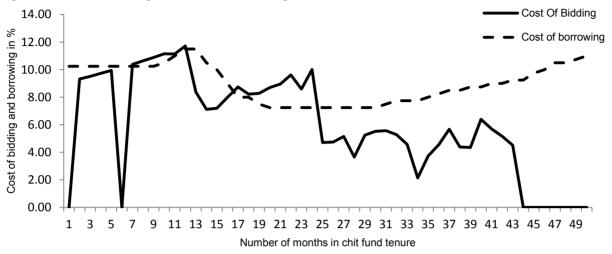


Figure 2: Cost of Bidding and Cost of borrowing

Comparison of cost of bidding and cost of borrowings of MSMEs is represented in the above figure for the chit fund tenure of fifty monthsi.e. from September 2007 to October 2011.

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# XP PROJECT PERFORMANCE MANAGEENT VIA STATISTICAL EVA

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## ABSTRACT

As an important project type of Agile Software Development, the performance evaluation and prediction for Extreme Programming (XP) project has significant meanings. Targeting on the short release life cycle and concurrent multitask features, a statistical earned value analysis (SEVA) model is proposed. Based on the traditional concept of earned value analysis, the SEVA model introduced Elastic Net regression function and Laplacian hierarchical model to construct a Bayesian Elastic Net model fitted for project performance evaluation and prediction. The model is demonstrated with the JAX Laboratory software development project data. With simulated coefficients estimation, we realized an empirical data support for project performance assessment.

# **INTRODUCTION**

There has been growing tendency for the usage of the Agile Software Development paradigm these years, due to its claimed lower costs, better performance, productivity, business satisfaction features by Mishra (2011). This paradigm can be applied to supply chain management (SCM), a complex software development project. Considering its wide scope and complex requirements, predictable models for software development process cannot be used. Targeting such problems involving variability and uncertainty, agile methodologies are adaptive rather than predictive. Thus, for project management, how to evaluate and manage the process performance aiming this development mode is an important issue.

Project Management Body of Knowledge (PMBOK), presented by U.S.A Project Management Institution (PMI), regards earned value management as a key method for project performance management. By conducting progress and cost analysis through Schedule Performance Index (SPI) and Cost Performance Index (CPI), this method is effective conditioned on two premises: first, earned value is convenient for acquiring and estimating, such as engineering project instance, completed progress's proportion of the total work amount would be easier to estimate; second, the ultimate goal of the project is relatively fixed, which would make the earned value estimation benchmark more constant. For Extreme Programming (XP) software project, the difficulty for spreading the application lies in the earned value determination during the process. Especially due to the variability of targets on a later stage of the project, the determination of earned value seems more difficult.

Kim and Reinschmidt (2011) proposed a probabilistic cost forecasting method based on self-adaptive inside view (the bottom-up estimate), combining with outside (top-down) view of project cost estimates using Bayesian inferences and model averaging technique. During the execution phase, through incorporating actual predictive performance and pre-project cost estimation modification, this method can sufficiently use available prior information. Its precision is high under the condition of linear cumulative cost curve, but models with highly nonlinear features will affect its suitability.

In this paper, we introduced a concept of statistical earned value analysis (SEVA). Targeted on the concurrent features of short release cycle, programming, test, and maintaining units for software extreme programming, an analytical model is proposed. This model is able to combine the data of project implementation process with Bayesian theory, and conduct posterior analysis according to the nonlinear characteristics, thus provide timely performance evaluation data analysis to project manager.

The paper's structure includes a short introduction to EVA, then an explanation of the Bayesian Elastic Net model followed by a description of the statistical inference methods employed. The project case used is illustrated; subsequently, the analytical results are presented.

### METHOLOGY

The nature of the XP problem is shown in Figure 1; from which we can see that the prophase and interim performance prediction analysis, with the prophase performance benchmark obtained at early stage, will gradually be adjusted during the development process when performance information and clearer project requirements are gathered from clients and developers.

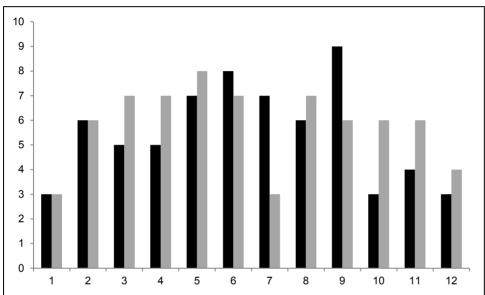


Figure 1: Performance evaluation and prediction before and after requirements change

Considering the differences between base and empirical performance for XP projects, the life cycle data is regarded as having truncated features. That is to suppose that only partial life cycle of subroutine individual (explicit requirement) is less than certain value, while the residual potential demand development time exceeds certain value. Since distinct truncation will lead to differences, the SEVA methods are based on Bayesian survival analytical theories. Using Elastic Net method and MCMC steady-state simulation method or variational Bayesian (VB) inference algorithms as derived by Park and Casella (2008), we constructed project Bayesian survival analysis model, in order to solve the difficulties of high dimensional numerical integration. By constructing XP project life period regression model, the influence of environmental and target conditions variability on the project performance is effectively reflected. The key steps for this analytical model, which are derived in detail by Chen, Carlson and Zaas (2011) are as follows:

Step 1: Construct Elastic Net regression target function to solve multi-linear problem as a substitution of Principal factor analysis;

$$\hat{\beta}(Naive \ ENet) = \arg\min\|y - X\beta\|_2^2 + \lambda_1\|\beta\|_1 + \lambda_2\|\beta\|_2^2 \tag{1}$$

This figure shows the idea behind XP project where darker bars indicate expected performance while lighter color bars are performance evaluations after requirements change

This is the naïve elastic net criterion, which can be viewed as a penalized least squares method and a convex combination of the lasso and ridge penalty.

Step 2: Construct Laplacian Hierarchical Model with the following Laplace prior form;

$$p(\beta|\tau,\gamma) = \prod_{j=1}^{p} \frac{\sqrt{\gamma_{j}\tau}}{2} exp\left(-\sqrt{\gamma_{j}\tau}|\beta_{j}|\right)$$
$$= \prod_{j=1}^{p} \int N(\beta_{j}; 0, \tau^{-1}\alpha_{j}^{-1}) InvGa\left(\alpha_{j}; 1, \frac{\gamma_{j}}{2}\right) d\alpha_{j}$$
(2)

Step 3: Construct the complete Bayesian Elastic Net Model. A Gamma prior is imposed on each individual  $\gamma_i$  to avoid tuning;

$$\mathbf{y} \sim N(\mathbf{y}; \mathbf{X}\boldsymbol{\beta}, \tau^{-1}\mathbf{I}) \beta_{j} \sim N(\boldsymbol{\beta}_{j}; 0, \tau^{-1}(\boldsymbol{\alpha}_{j} + \lambda_{2})^{-1}) \tau \sim Ga(\tau; c_{0}, d_{0}) \alpha_{j} \sim \eta(\alpha_{j}/(\alpha_{j} + \lambda_{2}))^{\frac{1}{2}} InvGa\left(\alpha_{j}; 1, \frac{\gamma}{2}\right) Ga(\gamma_{j}; a_{0}, b_{0})$$

$$(3)$$

Where  $\eta$  is a normalizing constant, and  $\lambda_2$  is a parameter tuned by cross validation.

Step 4: Put forward the specific hyper-parameters of fully extended model.

$$p(\mathbf{y}, \beta, \tau, \alpha, \gamma) \propto N(\mathbf{y}; \mathbf{X}\beta, \tau^{-1}I)Ga(\tau; c_0, d_0)$$

$$\times \prod_{j=1}^{p} N\left(\beta_j; 0, \tau^{-1}(\alpha_j + \lambda_2)^{-1}\right) (\alpha_j / (\alpha_j + \lambda_2))^{\frac{1}{2}}$$

$$\times InvGa\left(\alpha_j; 1, \frac{\gamma_j}{2}\right)Ga(\gamma_j; a_0, b_0)$$
(4)

#### Case Analysis

A case study of software development at JAX Laboratory is presented in this section. This is a comprehensive system development project which requires data preprocessing, singular value decomposition (SVD), single-locus regression, Extreme Value Decomposition (EVD) test, pair-wise linear regression analysis, error propagation calculation, permutation test and networking construction in a 3-month period. Using extreme programming (XP) mode, this project gradually perfects the identification and range definition of final target. Thus, an EVA method combining with dynamic prediction is required. Due to the uncertainty in initial phases of development, there are several modifications of bench plan during the process requiring prediction analysis to determine the best action strategy. Here, we use character A-J to represent each step of JAX project. Each of them contains about 50 activities. Performance analysis is conducted on a daily basis. By adopting statistical earned value analysis (SEVA) methods, we applied Bayesian posterior model to performance prediction. Based on Bayesian Enet model presented in the previous section, SEVA results during the project implementation process are shown in Table 1.

Α	В	С	D	Е	F	G	Н	Ι	J
0.077	0.096	0.161	0.064	0.161	0.096	0.080	0.064	0.125	0.074
0.073	0.091	0.152	0.061	0.152	0.091	0.076	0.061	0.119	0.070
0.073	0.118	0.210	0.085	0.152	0.091	0.076	0.061	0.119	0.070
0.069	0.112	0.199	0.080	0.144	0.087	0.072	0.058	0.113	0.066

Table 1: Statistical earned value analysis during the project implementation phases

This table shows the earned value of each project stage, where A-J represents the steps in sequence.

After simulating with Schedule Performance Index (SPI) and Cost Performance Index (CPI) analysis, we can obtain the project performance evaluation for each stage (Table 2).

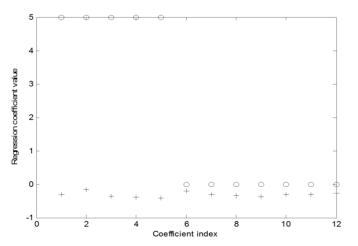
Table 2: SPI and CPI analysis during the implementation process

SPI	1.7	3.6	1.5	2.2	0.5	1.4	1.6	2.2	2.9	1.4
CPI	0.5	1.0	1.4	1.9	0.3	1.4	1.8	1.1	3.5	3.2
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This table shows the SPI and CPI values of each project stage.

We applied the Bayesian Elastic Net model introduced in the previous section to 12 groups of simulated data, where each group includes 10 earned values of sequential steps A-J. The simulation results are shown in Figure 2. The circles represent our prior expectations of the project performance, while the crosses represent posterior performance estimations. After using five samples for regression coefficient training, we modified our performance beliefs for the left seven samples. From the figure, we can see that the residuals are within acceptable range, which proves the effectiveness of SEVA method.

Figure 2: Performance prediction using Bayesian Enet Model



This figure shows the Bayesian Enet estimation for performance prediction. Circles represent prior beliefs, while crosses indicate the posterior performance values for each simulated sample. The first five samples are used for regression coefficient training, and the last seven ones are used for prediction testing.

#### CONCLUSION

A unique feature of XP project is its changing target with increasing clarity. This requires a correspondent reliable performance management mode. The SEVA method we proposed in this paper

solves the prediction difficulty occurring in traditional earned value analysis due to constant change of targets. Thus provides an efficient approach for dynamic project prediction and strategy management **REFERENCE** 

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# DESIGN OF A LOGISTICS MANAGEMENT MODEL FOR SMEs OF TEXTILE MANUFACTURE

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## ABSTRACT

The world-wide markets opening and consequently the supply chain globalization, demands a structural series of changes to which logistics must answer. Nowadays customers are more demanding and not only do they assess the product quality but also the added value of it; what used to be special services are now standard services this implies to reduce costs in order to be competitive on the market without affecting the quality of the service or product. The logistics is not only important for itself, but also generates a traction effect of the private sector development and the economic growth of the country or region. A supply chain accessible and efficient is a key element for the enterprise; particularly the small and medium compete successfully in the globalization. This investigation is descriptive and uses secondary information which was the base for designed a logistics management model for SMEs that allows integrate resources, abilities and required systems to improve its performance as part of a supply chain.

JEL: L25, M11

KEY WORDS: SMEs, competitivity, logistic, supply-chain, logistic management models.

## INTRODUCTION

Given the constant changes where the markets, the products and the competitors transform so rapidly, organizations can difficultly respond to new circumstances, especially in textile manufacture SMEs in order to maintain a competitivity level solid enough and sustainable so it can guarantee its survival on the market. One of the biggest problems of SMEs is the formality absence (Díaz, Corona & Mayett, 2012), meaning, the lack of procedures, of a organized structure, of programs and planning, on the other hand the economic development of an enterprise is directly related with its management and effectiveness. Therefore is important that enterprises seek optimization of its logistic management in all the supplychain, so that they expedite the flow of products and information at the lowest cost. One model of logistic management for SMEs is different from big enterprises, basically for the technological resources used, language, the structure and the culture under which this model operates (Velásquez, 2003).

### LITERATURE REVIEW

Several researchers have found out that SMEs generally lack of a formal structure in most of its areas (Díaz *et al.*, 2012; Robles, 2003). Due to its size and the lack of economic resources, it's common that the employees perform more than one activity and many of them haven't got any specialization; it's common to observe the same persons who manage perform financial planning functions, production, personnel management and commercialization, among others. The lack of specialization makes them develop logistic activities of lower level due to the lack of technical knowledge and the incorrect implementation of the concept chain supply (Banco Interamericano de Desarrollo [BID], 2011). The different internal crises which this causes influence its productivity and competitivity (Daft, 2011; Rodríguez, 2003). Competitivity is the capacity to attract and withhold investments and talent (Consejo

Ejecutivo de Empresas Globales [CEEG], 2004; Instituto Mexicano para la Competitividad [IMCO], 2010), and the capacity to sustain and increase the market participation with business strategies without sacrifice profits (Hernández, 2000). The structure and organizational processes are the key element to fulfill the activities internal cohesion (Daft, 2011; Jones, 2006); logistics allows to project such activities in an external scenario, visualize the necessary links and activities in order to commercialize the product and increase competitiveness to regional or national level. The logistic activities are the engine and support for new investments in infrastructure for which the logistic integral platforms is a way to connect offer and demand (Secretaría de Economía [SE], 2011) to national and business level. Some experts have proposed integral management models logistics to increase competitiveness on the market.

- ✓ Mexico's Economy Ministry (2011) designed a model which considers 16 capacities, such as; strategy and performance of organization, customer service, processes management, demand administration, supply and purchase, customer order processing, warehouse operation, stock administration,transport, inverse-logistics, merchandise, transport-safety, import process/export, financial capacity, environmental awareness, information systems, data management, organization, personnel and competence.
- ✓ The operations reference model of the supply chain (SCOR-model: Supply Chain Operations Reference - model) developed in 1996 by Supply Chain Council of North America, is a standar which analyze and enhance the performance of the supply-chain of organizations the SCOR identifies mainly 5 processes of management, like planning, provisioning, manufacture, delivery, distribution and return.

The formerly mentioned models are far too ambitious for a SMEs due to its informal structure and the lack of technical knowledge. Other autor and organizations have developed logistics management models based on the specific characteristics of SMEs.

- ✓ Díaz Gómez, García Cáceres and Porcell Mancilla (2008) identified 3 main componets in the supply chain: provisioning, production and distribution. Although they involve all the participants of the supply-chain integration, the autors only study the suceptible parts of cost in it, setting apart the importance of management to improve the logistic performance of the supply-chain.
- ✓ González Camargo, Martínez, Malcón and Cavazos (2012) introduce a logistic management metodology for small enterprises improvement, and identify 5 opportunity áreas, such as provisioning, storing, distribution, customer cost and service. This investigation proposes logistic improvement tools in each area of opportunity which lead to reduce logistic cost, but this is not an integral model.
- ✓ The logistic management model proposed by Velásquez (2003), identifies on first stage production, sales and logistics; the second stage is the materials planning, inventory management and storage of raw material, the purchasing plan and the order placement to the supplier, and the third stage is based mainly on the sales planning and of course the execution of the same. This investigation describes an integral model of logistic management for SMEs, however the model loses integration force when identifies the indicators that a SMEs should have, for they are based in the accomplishing of them in an isolated way.
- ✓ The Policy General Management of Small and Medium Enterprise of Spain (2007) conducted a logistic management model derived from SCOR identifying the following áreas: procurement, production, storage, distribution and transport as well as customer service. This model is designed with the characteristics of SMEs, however the end of this research work is a Manual of best practices in logistics. In the revised models in the literature, some authors make indirect reference to the

importance of internal information flows of logistic management, for this reason the interrelation among the interest areas is weak, which implies a total disintegration of the system.

#### Proposed Conceptual Model

The present study of descriptive type is based on secondary information which allowed to design a model that eased the integral management of 4 the most important areas for SMEs of textile manufacture: inventory, storage, production and distribution, and the implementation of the tools which will improve the logistic performance of the supply chain.

#### Figure 1: Proposed model

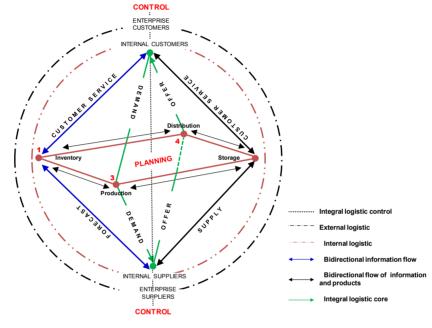


Figure 1 shows a model of logistic management. Source: Authors

This way the model core is the customers and suppliers information synchronized flow and vice versa, which means, the demand which starts in upper octahedron node (internal customers) and the offer in the lower node (internal suppliers) of it. Consequently the forecast demand thru the historical sales and the necessary material supply in the time and indicated place under the approach of just in time, are the support to initiate the planning of the 4 main areas of the model, these at the same time will interrelate, plan and control as an unit to impact directly the customer service level. The principal characteristic of the model is that it should be capable enough to share the key information among all members of the supply chain (from suppliers to customers) to reduce the uncertainty of it, because the decisions made at any vertex of the octahedron will impact all the others.

A production control hybrid system pull/push that operates in the right way and continues combining the advantages of both systems is able to reach a higher level of effectiveness. The push systems are commonly defined with the demand forecast for the materials planning. The pull systems are those in which the quantities of orders are determined based on the real demand. (Hirakawa, Hoshino & Katayama, 1992) The model will function under the approach of a hybrid system push/pull supply chain: for the process of pushing in the chain, this achieved with anticipation of the customer demand which means, warehouse and inventory level must be planned and controlled.

- 1. Inventory: the purpose of this area is to determine through quantitative models how much and when to require materials.
- 2. Storage: the purpose of this area is to work under operative regulations to safeguard and control efficiently the raw materials.

The process of pulling in chain is achieved based on the response of customer demand which means, the production and distribution activity level must be planned and controlled.

- 3. Production: the purpose of this area must function based on a master production program which will have to satisfy the customer demands; time, quantity and quality. It is necessary to identify the necessary tools and feasible to continuous improvement in the implementation of the process of goods transformation and the inventory in process.
- 4. Distribution: the purpose of this area must have a high capacity of customer response at the lowest cost, this implies to creating value in the supply chain thru the optimization of the inventory level of finished product, and transportation and delivery of the same.

The push/pull system must satisfy the customer in time, place, quality, quantity, service at the lowest possible cost.

#### CONCLUSIONS

In this investigation propose a logistics management model of the supply chain is of easy implementation for SMEs in the textil sector; for simplicity in each of the areas is very feasible that these companies adopt it as reference to improve logistics performance of the supply chain, since in each of the areas should take advantage of the technical knowledge and experience of human capital, so that they will propose the reachable improvements at a low cost. If this model is adopted by the studied SMEs, it will allow them to face the local and international markets globalization. This model can be transported to any SMEs sector.

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# MANAGEMENT ACCOUNTING PRACTICES (MAPS) IN ROMANIA SMALL BUSINESS

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# ABSTRACT

Management Accounting is providing information to managers in a way to control and direct businesses. Traditionally, management accounting is more towards the principle of variance analysis and still used by some of small manufacturing businesses. However, most of the traditional practices are using in conjunction with new management accounting practices (MAPs) such as life cycle cost analysis and activity based costing. Previously, most of the study is more concerned with financial accounting practices with providing information to shareholders and stakeholders of the businesses. In addition, the results of this study are expected to present the current practice level for each management accounting practices and considering a new practice in future as well as researchers believe that the purpose of management accounting practices is crucial in assisting the effectiveness of managing, decision making and controlling process in Romanian small businesses. The aim of this paper is to contribute in bringing more clarity into the question: what is the current status of Management Accounting Practices in Romanian small business?

# INTRODUCTION

The role of managerial accounting is very different now then it was a decade ago. This process is known as identifying, measuring, analyzing, interpreting, and communicating information in achievement of organization's purpose and goals. It's also an integral part of the management process, managerial accountants which are important strategic partners in management team.

At various times cost accounting has been driven by financial accounting and the need to supply information on inventory value and costs (Johnson & Kaplan, 1987) and the environment that management accountants work in has changed in the last century therefore traditional economies has moved from a state of mass production to mass customisation (Ross, 1990).

However, Kaplan (1984) has argued that there has been no development of management accounting techniques during the period of 1925 to the 1980s. Furthermore, Atkinson (1987) confirmed a crisis of management accounting profession that has lost relevance in Canada. But, Boer (2000) acknowledges that there is a change in management accounting practice, but is unsure what the change has been to. Thus, researches implement this survey in order to investigate the behaviour of management accounting practices particularly in small business.

# LITERATURE REVIEW

They found that traditional management accounting techniques were widely adopted than recently developed techniques. However, most of the companies intended to adopt newer techniques in future especially activity based technique and benchmarking.

In adoption of new and developed techniques, the most important factor is the size of company perhaps since the adoption will be too costly and the changes are too complex. Management accounting practices survey has been conducted by Dick-Forde et al, (2007) and also consists of the importance of management information to management decision making in organization. At present, management is

really focusing on financial accounting report instead the importance of cost management in organization. In fact, the cost management is the one importance aspect in determining the successful of organization operation.

Moreover, the objective of organization perceived management accounting practices are very important to determine. According to Dick-Forde et al, (2007), they found the most important objectives were for the purpose of cost control, cost allocation, pricing decision and cost reduction. Guilding et al. (2005) has suggests that Barbadian companies has some control over the prices they set and as a result seek to manage their profitability through cost plus pricing strategies. Beside the objectives, management accounting practices are for the purpose of information for annual reports, strategic decision making, inventory management planning, performance evaluation and risk management.

## IMPACT OF MANAGEMENT ACCOUNTING PRACTICES (MAPS)

A disparity exists among the registration methods used by the traditional accounting that they have its sustenance in a normative that doesn't recognize the intangible participation of certain assets, same that generate wealth, this causes that the entities can lose value when not determining its investment in human capital. Through the pattern it is possible to relate the capacity that they have the human capital and those other active intangible in the generation of economic value in an entity, for it is necessary to recognize the importance of the corporate strategy, the one that in turn you are reflected in the value of market of the action which can be explained starting from their price in more books the components related to the human capital, relational and structural, as well as of the perspective of the economy, of the industry and of the company. The preliminary result of this investigation hurtles that the intangible assets such as the human capital according to the steps that are mentioned previously, can be transformed in active tangible that which would become part of the financial states of the company therefore one can say that it interferes in the economic value of the action of the same one. You can identify in the same way in the entities the use that they make of their intangible assets, that their inclination to the one human capital, to the structural capital, or to the relational, allowing to show to the investors and analysts information for the taking of decisions.

The managerial system of the company contains the shaping and exertion of the processes and managerial relations in a certain manner, as to determine the obtaining of high competitiveness. In other words, the managerial system, can be defined as the total of the elements with a decisional, organized, informational, motivational aspect from within the organization, through which is exerted the management process and relation ensemble.

When it comes to them, the elements which compose the informational system greatly mark the running of the managerial instrument. The biggest impact is held by the quality of the information delivered, which, evidently, depend greatly of the characteristics of the procedures, circuits, transfer and informational means.

The data and information represent, accompanied by the decisions as well, the main inputs in the methodical – managing system, seriously limiting its effects generated directly and indirectly. The relations between the informational system and the organization system are both functional and structural-constructive. The entire informational system is held by the organizational structure of the company. Working with the data and information, the operation of the moving of information and the informational procedures, the use of means to deal the information are the result of the tasks, competences and responsibilities exertion of certain managers. Their reasoning has a great impact over all the components of the informational system. Simultaneously, there's a strong influence of the organizational culture over the informational elements. This influence is functional, and is exerted especially over the operational way of the components of the informational system.

By the correlative measuring of the performances, we call upon concepts of competitiveness and competitor advantage. Inevitably, the notion of performance brings to light the efficiency and efficacy, and the indicators of performance acquire a special diversity. Therefore, the obtaining of performances at a company level assumes, directly or indirectly, the revaluation of the concepts of competitiveness, competitor advantage, efficiency and efficacy. Performance is not a simple ascertained fact of a result, but just the opposite, is the consequence of a comparison between result and objective.

The proportions the term "practice" of performance has achieved, led to outline of a new concept, the one of performance management, itself debatable, but justified by the orientations which the stating of performance in the centre of the managerial concerns of the organization gives the present steps and especially to the future ones of it.

Also, performance cannot be defined as a great result obtained in the field of management, economics, commercial which gives characteristics of competitiveness, efficiency and efficacy to the organization and its procession and structural components. Which is particularly interesting are the theory and managerial practice from Romania, the managerial performances, which are absolutely necessary to obtain economic and financial performances in the fields they run.

The unanimous recognized conditions by specialists in this area of scientific concerns are clear: only a performing management, exerted by professional managers, is capable of managerial performances, generated by social, economic, financial performances. For this it is necessary to know the accomplishments of other organizations in the reference fields in order to compare (volume indicators, quantity, as well as efficiency). The pattern gives the rule for a perspective of long term, showing the future possibilities of benefit of the company, developing an entire strategy starting from the intangible ones when having a tool for its installation, what guarantees the coherence between this and the defined indicators.

One can inform about the capacity of the entity to generate sustainable results and of continuous improvement. It is contributed to the improvement of the competitiveness of the entity using for it the diagnosis and the administration of their intangible elements that although they don't appear in the traditional financial states, they contribute in a significant way in the generation of present and future results, for what should be appropriately negotiated, allowing to evaluate through measures quantitative areas that are generally evaluated in base perceptions (human resources, administration of the knowledge, relationship with clients), for what offers the administrators a tool to evaluate their administration. It intends a methodology that allows to develop and I diagnose, identifying the cause through the tools of the administrative theory the possible solutions, indicating the parameters of the before and of the one later. Through the strategic mapped it is demonstrated the value of the activities and processes with the rising increment of the added value. The pattern helps to identify the differentiation of the entity by means of the administration of the knowledge, giving rule to develop a language shared between the entity and the individual. Equally it can settle down that by means of tools like the square of integral control and the systemic focus strategies can be created to go increasing this tangible value in economic use of the action of the company. Therefore, this procedure type will bring a lot of polemic to be able to look for the form of settling down in what it leaves of the financial states you can quantify the human capital, you can conclude that in a future not very distant when this model is implemented in some company she will give as a result that the value of the action based on a part proportional for the human capital will acquire bigger value.

# METHODOLOGY

The methodology of research was focused on two directions: first, we tried to identify the elements that constitute the Management Accounting Practices potential from the firm point of view; second we analyzed outlines differentiate results for various participating groups according to the objectives of this paper.

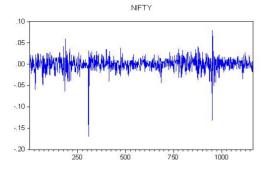
The method was chosen as it is web-based questionnaire and the survey instrument used in this study was a structured questionnaire for the quantitative study. The questionnaire was made up of two parts and it comprises a total of 25 questions. The first part of the questionnaire gathered background information of the respondents from different Romanian SME's, which filled up the questionnaires and representing Management Accounting Practices users. The second part of the questionnaire addressed the scale items related to the social organizations (Management Accounting Practices non-users or indecisive). The variables were measured using multiple items. All of the scale items represented in the survey instrument utilized a five – point categorical rating scale. The anchors used included: a) 1 = not at all, b) 2 = few, c) 3 = partly, d) 4 = good, e) 5 = very good. The online survey system provides a total of 1145 data records.

# RESULTS

Based on the scoring results in the questionnaire 54 percent of the participants associated Management Accounting Practices with strategy whereas 34 percent regarded the topic as an additional instrument for corporate management and even 19 percent acknowledged Management Accounting Practices as one of the most important competitive advantages in future. Eleven percent identified a current trend and for another ten percent the topic was yet completely undeveloped. This result indicates a general confession of Romanian SME's to Management Accounting Practices as an important management topic. Considering different sub-groups it is remarkable that micro enterprises assumed with 19 percent an overaverage attitude that the topic is only trendy which is intensified with an under-average vote of only 12 percent for the consideration of Management Accounting Practices as a competitive advantage. From those participants considering the topic yet as a completely unimproved land, 82 percent argued that they heard for the first time about Management Accounting Practices in the survey.

The questionnaire survey has demonstrated that 21 percent of all participants committed themselves to the use of Management Accounting Practices, 49 percent were non-users and 30 percent were not sure if it is used in their companies. This is not remarkable because general comprehension expects an increasing willingness for strategic planning and the availability of resources as a function of increasing company size.

The results (figure 1 and figure 2) show that the question "Does the Romanian SME's use Management Accounting Practices?" categorizes the participants quantitatively in Management Accounting Practices users, non-users and indecisive.



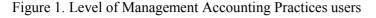
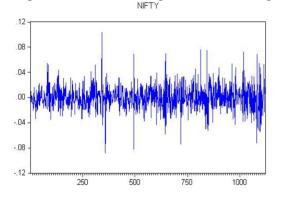


Figure 2. Level of Management Accounting Practices non-users



According with data the result admits the follow considerations: either the participating Romanian SME's have a different understanding of managing Management Accounting or they are pioneers in Management Accounting Practices yet before large-sized enterprises which appear unreasonable. This result reflects that the importance and relevance of the topic is associated correctly to corresponding functional areas. It leads to the conclusion that Management Accounting Practices users are aware of a proper integration into business.

# THEORETICAL AND PRACTICAL IMPLICATIONS

The important effects on Management Accounting Practices in Romanian SMEs which have to be taken in account is the number of channels which have to be considered increases and comes along with a higher speed on building Management Accounting as well as an additional coverage of publicity.

The results of present study leads to the conclusion that all mean values are over-average, which confirms that Romanian SME's have already a considerable level of proficiency in Management Accounting Practices. The well-balanced best practice shows that it is definitely possible for SME's to use Management Accounting Practices in a professional and successful way. Regarding the mean value it is obviously that, beside of the internal dimension, there is a large potential for advanced optimisation. The worst practice shows the example of a company that is mainly market-driven whereas other aspects are regarded of lower priority.

After regarding the influence of Management Accounting Practices obtain with this design, it is useful to confront the expectations of non-users with the experiences of users. As experiences prove that many enterprises introduce Management Accounting Practices as a reaction on a sudden damage of reputation. Practical in the Romanian SMEs case, the Management Accounting Practices is useful to think about an enhanced or modified measurement.

# CONCLUSIONS

This study attempts to determine the Management Accounting Practices (MAPs) in Small Business. Beside that, this study will also indicate the most important objective for Management Accounting Practices (MAPs) in Small Business. The result shows most of the businesses have their own used of management accounting practices (MAPs). However, they need to improve their knowledge and skills in accounting in order to increase the usage frequency in management accounting practices. Then, most of the business also preferred to prepare the monthly report for costing and management accounting. This report is seems useful in management for decision making particularly for costing because monthly report is one of accurate and sufficient information. Further, the most preferable usage for Management Accounting Practices (MAPs) are standard costing, annual budget, process costing, cash budget, and fixed/variable cost analysis. The usage of new technique of MAPs application is depends on business transaction and operation because we can assume that the more complicated the operation, the more advances technique or approach needs to be implemented in order to confirm their efficiency.

The originality value of this research are: considerations regarding the role of Management Accounting Practice (MAP) as a pivotal instrument to support management in changing organizations and actual concerns regarding the maintain Management Accounting of Romanian SMEs for measure progress because there is no control to anticipate concerted activities or step in if requested.

This study confirmed that the use of Management Accounting Practice (MAP) in Romanian SMEs improves the exchange with all stakeholders and enhances the knowledge of stakeholder needs. Management Accounting Practice (MAP) users have a high contact rate with their environment and work intensively on business improvements.

Finally, the results also show that the most importance objective perceived for each Management Accounting Practice (MAP) are pricing decision, cost control and reduction, planning and budgeting and cost allocation. This objective perceived importance to business in order to confirm the advancement of management accounting practices.

So, the Romanian SMEs must be opened for external support in Management Accounting Practices and is better to create a measurement system referring to six beneficial aspects regarding this concept: internal, financial, market, public relations, political-legal and online. Due to the fact that Management Accounting Practices influence all dimensions and is the most important theme today.

Management Accounting Practices (MAPs) in Small Business is a phenomenon which exists and it is helpful to know that the work is dealing with socially constructed interpretations of people and companies. Moreover, the Management Accounting Practices in Romanian SMEs is subject to permanent changes and is influenced by individual perception.

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# ABSTRACT

Goold & Campbell (1994) were one of the first to develop guidelines on how a holding company can build a portfolio of businesses using their parenting advantage model. The parent company is an independent company whose role is to create value its subsidiaries. If the parent lacks the capability, or if another owner could add more values, the original parent should consider selling the subsidiary. This paper examines three parenting frameworks including the Strategic Planner, the Strategic Controller and the Financial Controller. The Strategic Planner model exists when the parent has a significant influence on the strategy and planning of the subsidiary. The Financial Controller model occurs when the parent focuses on the financial performance and control of the subsidiary. The Strategic Controller parent balances the other two roles. Research has been done on strategic parenting in large holding companies, but less is known about the normative and theoretical behaviour of small holding companies. This paper recommends research on this topic and lays out a preliminary research agenda.

JEL: G30, G32

**KEYWORDS:** conglomerate management, business-parenting models, parent company, holdingcompany theory

# **INTRODUCTION**

During the 1960's and 1970's, corporate conglomerates emerged in the financial the market place. Many became a new kind of holding company that functioned as a center of control for a group of related or unrelated subsidiaries. The focus of many corporate holding companies was on enhancing the individual performance of the business, the business strategy and not on the overall holding company strategy. This was not done because Chief Executive Officers lacked the tools to successfully address this issue (Campbell, Goold and Alexander, 1995). In the 1970s the first models on corporate level strategy were introduced such as the Boston Consulting Group growth/share matrix.

In the 1980's, Peters and Waterman (1981) published *In Search of Excellence*. Their view suggested that holding companies should only focus on companies with superior performance. Having a portfolio with companies to achieve financial diversification reasons was not desirable. More recently, Macleod and Stuckey (2009) revisit the McKinsey-General Electric Strategy Grid and adapt to the analysis of holding company performance by considering the subsidiary's stand-alone value with its value within its holding company. Hamel and Prahalad (1990) introduced "the Core Competence principle" in the *Harvard Business Review*. According to them, companies should build their portfolios around their core competences. Core competencies will create a competitive advantage. The issue left unexplored is can strategic parenting behaviour be a core competence that justifies the parent's position. This theory and that of Peters and Waterman (1981) lack guidelines on how to build a holding-company strategy that can drive excellence in or enhance strategic position of a subsidiary. Furthermore, there are many examples of successful conglomerates that consist of companies that have nothing operational or technical in common and with all different kind of competences, so these two views will not hold for all conglomerates. Goold and Campbell (1987) had already introduced a framework that fills the gap of the

core-competence model. It has developed and evolved over the years and now provides the CEO with practical guidelines on how to build a successful conglomerate. They called it *the Parenting Advantage Framework*. This framework can be applied to the special case of small holding companies. This paper lays out a research agenda to show how this model can be used to explore methods to enhance the performance of small holding companies.

#### Parenting Advantage Framework

Different parenting models are explained in depth in Goold and Campbell's book *Strategies & Styles* (1987). Their model addresses two corporate-strategy questions: 1) *What businesses should owned by the parent*, and 2) *How can the parent create optimal value from those subsidiaries*. The answers to these questions depend on how the parent influences subsidiary manager behaviour, affects decisions they make, and drives the resulting subsidiary performance. Their parenting models result from extensive research at multibusiness companies. Their framework is built on two dimensions of holding company influence: control and planning. By achieving the correct balance between these two dimensions, the parent can create subsidiary and holding company value. This parenting framework focuses not on the businesses as such, but on the competences of the parent and the value created from the relation between the parent and the businesses. The degree to which the parent use planning and control results in a certain parenting style.

If the holding company acts to shape strategies and guide strategic decisions, the parent is exerting "planning influence." Planning influence concerns the input side of a decision. According to Goold and Campbell (1987), there are at least seven tools the parent can use to influence the planning of the businesses: organisation structure, review of subsidiary plans, strategic themes, broad strategic thrusts, specific suggestions, management of overlaps between businesses and allocation of resources

The second type of influence is "control influence." Control influence focuses on the output and results of decisions. It is comprised of activities the holding company uses to drive the performance of subsidiaries. It emerges from the performance targets that are set, the monitoring of those targets and the pressures and incentives from achieving or failing to achieve the set targets. From these influences, seven different parenting styles have been identified that fit into three overarching styles: Financial Control, Strategic Control, and Strategic Planning. One of the most important conclusions of the research of Goold and Campbell is that no single model is perfect for every company. What the researchers have done is to give a framework for describing the variety of approaches. Goold and Campbell (1987) identified seven different parenting styles depending on the difference in control or planning influence. The framework shows the key differences between the different approaches to make the company choose its style of preference thorough research to support that choice. The framework was up-dated and its normative value was enhanced in Campbell, Goold and Anderson (1995).

# Strategic Parenting Styles: Financial Control, Strategic Control, And Strategic Planner

In Financial Controller companies there are clear strategic responsibilities for the business units. The Financial Controller parent will exert little influence on the formulation of strategy but puts most attention on the financial performance of the subsidiary. The subsidiary director is responsible for the business and the company is as independent of operational influence from the holding company as possible. Each business unit is a profit centre. It is possible that a divisional layer is in place, but responsibilities are delegated as much as possible. The holding company is small with a strong finance function. Finance directors have an important role in the decision making process. Subsidiary finance directors may report directly to the holding company CFO and therefore have a higher status than in other type of parenting models. Financial Controller companies in general set the same financial objectives for their businesses: a stretching standard that the managing director has to achieve. A managing director proposes a target

that he can achieve and if possible, that is better than the previous one. It is challenging to get the proposed targets accepted. Managing directors are questioned on why the targets are suggested as such in great detail. This could result in a revised profit forecast. It is important that the targets are stretched. They will put great demand on the subsidiary managers.

In general financial results are monitored on a monthly and quarterly basis. Together with the numbers an explanation is presented, in which specific deviations from the set target are highlighted. The results are reviewed by the Financial Controllers and presented to the line management. In some companies the CEO will contact a managing director if his results are not in line with the budget. As it is sometimes difficult to project budgets in unpredictable businesses, Financial Controller companies in many cases avoid businesses in unpredictable markets. Financial Controller companies have strong incentive schemes. As they strongly believe in upholding these, managers are replaced quite quickly if they do not achieve their targets. In Strategic Planner companies, the holding company has a very important role in the development of both holding company and the business unit strategy. The main reasoning for a holding company to adopt this strategy is the fear that operational managers will not look beyond a short-term, up to two-year time horizon. To motivate a longer-term orientation, the holding company exercises its influence within the subsidiary planning and implementation process.

The organisation of a strategic planning company is more complicated than a Financial Controller company. Responsibility is still with the subsidiaries, but non-finance functions have more influence under this model, and the resulting organization is more complex. There often are levels that provide input on the strategy of a business. By setting up a more complex structure, Strategic Planning companies hope to make better use of the interdependence and synergies between the businesses and they hope a more complex structure from the different perspectives results in a more effective overall strategy.

Strategic Planning companies give their ideas on the business strategy to the managing directors of subsidiary businesses. They may propose clear top-down strategic themes and thrusts for the entire portfolio. The holding company is more likely to provide specific suggestions for the strategy of individual business. The strategic planning company may for example tell s business unit to expand in the United States to leverage scope economies from the distribution channel of another subsidiary. Strategic Planning companies have elaborate planning systems to measure strategic achievements, but do not rely on control as much as Financial Controller companies. The targets are the result of the strategic planning sessions. In general both short and long-term targets are set. Both financial and non-financial targets are set. Even though there are incentives to achieve these results, the goal is more to follow the long-term strategy than specific short-term goals. As long as the business is on track with regard to the strategy, deviations from agreed upon specific goals is often accepted.

In **Strategic Controller** companies want to have influence on the business unit planning, there are clear strategic responsibilities for the business units. The strategic initiative is left as much as possible to the subsidiaries. Each business is a profit center and there is less coordination between the different subsidiaries. The managing director is responsible for the subsidiary. The holding company is small with strong finance and strategic functions. Strategic Controller companies have a formal and structured planning process: both the budget and plans are set and reviewed in a structured way. Like in Strategic Planning companies the process starts with guidelines sent out by the parent including topics and forms of reporting. On the basis of this a narrative strategic plan is made, which is the foundation for a more detailed three-year plan. Finally, a more detailed one year operating plan is made which includes the budget and the steps to make towards the achievement of the strategy. The plan will be analysed in detail to achieve a final plan. All plans (both financial and strategic) should be consistent with the strategy. Strategic themes, directions and suggestions are, often not given. Some Strategic Controller companies do however give general guidelines on the strategic direction of the conglomerate and thus give rough direction to the businesses' strategic direction. As independence of the businesses is one of the most

important factors of this model, in general synergies are not sought or heavily coordinated by corporate. At divisional level, this is however done. While for example transfer pricing is at arm's length, there is some intercompany preference, as long as the prices are competitive.

Targets in Strategic Controller companies often result from the elaborate discussions on the plan to achieve a certain strategy. One could therefore suggest that the targets are formulated bottom-up, as the businesses formulate the plans. This is however not entirely true as the holding company through the discussions can stretch the targets set by the businesses. As with Strategic Planning companies the plans generate long term plans and short-term operational actions and milestones, again consistent with the strategic plan. The targets that will be set will be both financial and non-financial. A balance has to be struck between long- and short-term goals, as well as strategic and operational results. Strategic Controller companies like Financial Controller companies have strong incentive schemes. The incentive scheme has both a carrot and stick affect. Failure to achieve the set targets is penalised, often with dismissal (stick), but achievement is rewarded (carrot). The biggest problem of a Strategic Controller company is that the combination of tight enforcement of targets and the balance of long-term strategic goals lies with the measurement of the goals. Contrary to financial goals, (non-financial) strategic goals are hard to define and therefore hard to measure. The risk is that either financial (easily measurable) are given more priority or that the control function as such becomes less important, thus undermining the entire control system.

# **RESEARCH AGENDA**

The relationship between a holding company and its subsidiaries can be viewed as a special type of strategic alliance. Anecdotal evidence suggests that a strategic alliance is more likely to be stable if three attributes are present. 1) Stability is increased if there is a financial incentive for both partners to remain in the alliance. 2) Strategic alliances are more likely to arise and continue if there is a continuing congruence between strategic needs of both partners. 3) Strategic alliances are more stable if there is consistency between the partners' cultural value systems. The Goold and Campbell (1987, 1994) strategic parenting model fit within this overall framework. The financial parenting model is designed to maintain the financial fit. The strategic parenting model maintains the strategic fit. The cultural fit either arose naturally or can be imposed by *fiat* from the holding company. A number of research issues emerge from this general view of strategic alliance stability. When applied to holding companies that act as "strategic parents" of subsidiaries, the following researchable issues emerge:

- 1) How does relationship stability develop in the parent-subsidiary relationship?
- 2) Are there other stabilizing factors in parent-subsidiary beyond the three identified above?
- 3) What are the specific effects of those three factors on parent-subsidiary alliances?
- 4) How should parent-subsidiary alliances be managed to maximise the value of the subsidiary and the parent? This is the primary focus of the Goold and Campbell typology.
- 5) Can the overall competitive strength and financial portfolio effect within a holding company be assessed? How?
- 6) Can the holding company provide branding or other marketing value to the subsidiaries?
- 7) How can synergies between subsidiaries be defined, assessed, built, and enhanced by the holding company?
- 8) What are the most effective methods of assessing the portfolio managing capability of the holding company?
- 9) Are there differences in research approach, research issues and management effectiveness measures across holding company sizes? Are there differences between a \$500M holding company and a \$5B one?
- 10) How can research studies of holding company management be operationalized?
- 11) Are there unique approaches available for studying holding company theory?

- 12) How does holding company or subsidiary proactivity affect performance of the holding company and the subsidiary?
- 13) What are the most effective ways of governing the subsidiaries? This is the main question approached by Goold and Campbell (1987).
- 14) How does the governance of the holding company-subsidiary and subsidiary-to-subsidiary relationship affect overall portfolio value? How does overall portfolio coordination affect portfolio financial value?
- 15) Is there a theoretically and empirically defensible of parent-subsidiary portfolio value that has been developed? How can it be tested? Defended?

These are a subset of the researchable issues that may have been partially explored. However, much opportunity for future research exists in this field.

# CONCLUSIONS

We have used the theoretical foundations developed by Goold and Campbell as a foundation to explore the possible research issues inherent in parent-company value enhancement and subsidiary management. From this foundation, we looked at their theory and its implications for holding company management as defined by Goold and Campbell. This short review shows that there are many potential areas of research available in this field. A thorough review of this literature was not found during this exploratory phase of this project. A good next step would be to determine if there has been a recent, relatively complete review of parent-subsidiary management research published. If not, there will be real value in filling this research gap. We then identified a short inventory of potential research issues within this field in order to chart a path for a multi-year research project on parent-subsidiary management.

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# INNOVATION OF ROMANIAN SMEs - A DEVELOPING STRATEGY OF THE ECONOMICAL ACTIVITY PERSPECTIVE

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# ABSTRACT

Small businesses do not receive the recognition they deserve in a world where success is mandatory. This is a strange fact, if one considers that 70% of the world business is represented by small businesses owned by visionary persons who take advantages of acting at small scale and help create a more dynamic economy. With the current rapid transformation of markets, the first element which influences the strategy of economic activity of SMEs is the character of the innovation - what challenges does the innovation present. The second element is the capability of the SMEs to address those inherent challenges and also the capacity of the enterprise to muster resources and to act in a sufficiently dynamic way. The aim of this paper is to investigate the current state of innovation in Romanian SMEs and try to answer to the following question: What are the factors that influence in the low level of innovation of Romanian SMEs? The research will also establish constituents which are essential for the successful strategies of development of an innovation framework for SMEs.

# **INTRODUCTION**

The Small and Medium Enterprises' (SME) sector is important in the overcoming social tension brought up by the globalization tendencies connected with the rapid transfer of certain industrial programs to countries with lower wage costs and with a high intensity of global competition. The Romanian SMEs are outnumbering other types of firms in the economy based on innovation. For this reason, the importance given to this type of enterprises must increase. Today, these small and medium-sized enterprises (SMEs) are active contributors to the Romanian economic development as a whole. Innovation, in general, means all those scientific, organizational, financial and commercial lead steps, intentionally or not, the implementation of new or improved products or processes. Innovation is based on the results of new technological developments, the combination of existing technologies and other knowledge acquired by a particular organization. According to the last researches, approximately 30-60% from the small and medium enterprises from the production sector from OCDE countries can be characterized as innovative.

Smaller firms tend to be more and more innovative, engaging step by step in efforts for research and development and innovation in fields related to commercialization of the existing technologies, creation of products and services and the implementation of the flexible working practices. The smaller innovative firms have the agility to answer quickly to the technological changes and customer's needs. However, they can experience problems in acquiring the resources needed to answer to rapid changes; some of them solved this problem by joining to the cooperation networks in order to improve their innovative capabilities.On the other hand, innovations may represent novelties in one or along several dimensions. They may provide new products or services to a market; they may introduce new technology to existing products; they may introduce new forms of organization of a SMEs or a value creation chain.

The focus here is on innovation processes that are more than minor improvements of existing products or processes. Our interest is the introduction of products or processes that ax novelties to the degree that they represent new business concepts, and will require and provisions outside daily operations. The innovation infrastructure includes: incubators (infrastructure for start-ups), technological parks (experimental facilities), technical transfer centers and the system of intellectual property. Regarding the infrastructure,

the government consistent policy is measured according to the recently launched National Plan for Developing the Infrastructure for Innovation and Technological Transfer. In this plan, it is mentioned the amount which is destined to co-finance centers of technological transfer, office for connection with industry, technological parks and technological incubators.

For Romania, the small and medium businesses are the engine of the economic growth and a vector for disseminating the research and development results. The increase of the small and medium businesses sector had a positive influence upon the businesses environment reducing the unemployment rate and increasing the productivity. It is necessary for the Romanian state to rethink the fiscal system in order to better sustain the growth of the small and medium businesses sector taking into consideration that even though its major role in the development of the country is known and admitted the support is not likewise. We think of this considering that even though the number of the small and medium businesses in Romania has grown, the number of small and medium businesses to 1000 inhabitants is under the number from the European Union (in Romania the number of small and medium businesses to 1000 inhabitants is 25 and in the European Union is 64). The methodology of research was focused on two directions: first, we tried to identify the elements that constitute to investigate the current state of innovation from the Romanian SMEs point of view; second we analysed the barriers that stand in the way of implementing such a system used by these firms. Strategies related to the environmental characteristics, when an accentuate competition on the internal market and a rapid change rhythm in their activity domain can be associated with the orientation to the international market- between them it should be mentioned the niche's strategy, which presupposes their concentration on the products and services for which it is disposed competitive advantages as a result of their capacity of innovation, adaptability and personalization of the production in connection with the request exigencies.

# LITERATURE REVIEW

In discussions on innovation there is a tendency to associate it with large, technologically advanced firms. This was already a sensitive point for Schumpeter, as can be read in the contribution of C. Freeman in the Palgrave dictionary: "Schumpeter (1928 and 1942) is often known for his emphasis of the advantages of large size and monopoly on innovative performance, whilst traditional theory has continued to stress the advantages of competitive market structures".

Business innovation processes require access to new resources, including competence (Bayer & Gann, 2007; Chell & Baines, 2000), which are frequently tapped from external sources. Many therefore consider better access to such external resources to be a vital policy instrument to support the innovative capacity of the business sector, especially for smaller enterprises. The term innovation system (Cooke, 2001) has often been used to describe the interaction between an individual firm, on the one hand, and firms and institutions that can provide such resources on the other hand. Innovation systems have received attention from researchers as well as policy-makers as possible instruments for improving the innovation capacity of enterprises. It is imperative that innovation systems are developed with a thorough understanding of how enterprises utilize external resources in their innovation processes.

During times of dramatic changes in the business environment or when SMEs exploited completely new opportunities, incremental innovations would not provide sufficient le for rapid and large transformations. We refer to these large transitions over a short time period as radical innovations. They are also referred to with terms such as discontinuous or really-new innovate (Garcia & Calantone, 2002; McDermott & O'Connor, 2002). The innovation capacity of an enterprise thus rests on the foundation of its resources, which have been accumulated as a result of previous activities. These resources have been shaped by the needs of the past and are subsequently applied in the current innovation process to respond to the needs of the future. The ability to come up with novel solutions will therefore depend on an ability to adapt the

resources in response to the new requirements of the innovation process (Eisenhardt & Martin, 2000; Pek-Hooi, Mahmood, & Mitchell, 2004; Teece, Pisano, & Shuen, 1997).

To become or to remain competitive, Romanian companies must continually develop ways of operating through more sophisticated strategies aimed at increasing research and innovation capacity and functioning in a business environment to the highest level. The competitive advantage of Romanian SMEs will depend on the state to create attractive conditions for such local or foreign companies to find ways most effective way to mobilize them. Creating a stimulating business environment for SME growth and their competitiveness is based on the national strategy and government policies to facilitate an incentive framework for foreign investment and development of commercial partnerships with small and medium firms in other countries. This should be stimulated and the concentration of domestic private capital to help boost the sector's role the Romanian economy.

However, economic analysts are optimistic considering that previous experiences show that any difficult situation stimulates legal, fiscal or accounting creativity, and that management innovation helps companies quickly overcome the crisis by strengthening the administration of the competition for new customers and new markets. One of the leverage keys to increase competitiveness is management innovation. Still, Romania stands out through a low degree of innovation, but what is even more worrying, also through a highly reduced capacity to disseminate innovation. Economic analysts also state that this period provides Romanian companies with the opportunity of self-analysis and improvement, since the need for good strategies is particularly intense.

# METHODOLOGY

The survey instrument used in this study was as a combination of a questionnaire survey and research interviews. The type of questionnaire is a self-administered postal one and it included a short glossary explaining the purpose of the survey. The questionnaire is divided into three parts and has a total of 35 questions. To collect data from interviewees a number of 415 companies were contacted by phone between January 2012 and June 2012. Research interviews will then deepen and expand the results of the questionnaire topics. The development and the design of the questionnaire and the research interviews will be obey and observe three maxims of scientific method: construct validity, internal validity and external validity. A central role in both the questionnaire and interviews surveys will play the construction of scoring variables. They will be the pivotal element in developing a typology classifying an innovation of Romanian SMEs in strategies of development economic activity.

# RESULTS

This study analyses the quantitative and qualitative results of questionnaire and interview. Four hundred fifty representatives from different Romanian SMEs that approved to participate in this survey were distributed the questionnaires as sample respondents for this study. Despite the repeated reminders 341 filled - up questionnaires were received back in total. After elimination of received filled - up questionnaires in which item responses were missing, the final sample consisted of 295 responses. The usable response rate of 42,71% based on total number of respondents received the questionnaires are within the range typically reported for research studies in social sciences. Based on the scoring results in the questionnaire and the interview cases presented in table 1, typology for the companies' innovation process was derived. The typology of Bayer and Gann is widely accepted as being useful to assess the organizational behaviour Romanian SMEs.

Type of innovation process s	Questionnaire Results		Interview Results	
Reactor	126	42,71%	20	44,44%
Defender/Prospector	72	24,41%	10	22,22%
Analyser	79	26,78%	7	15,56%
Pattern not evaluated	18	6,10%	8	17,78%
Total	295	100%	45	100%

Table 1: Frequencies of the Types of Innovation process

To validate the scoring approaches, the multivariate methods of factor and cluster analyses was applied. The constituents of the scoring variables was undertaken a factor analysis, and the resulting factors would the input of a cluster analysis. The present analysis also had the aim to investigate the state of planning and how innovation process of Romanian SMEs is linked with it. However, the investigation has also revealed that business planning for Romanian SMEs is developed only in a rudimentary way. The results of the questionnaire and the research views have shown that firms having a controlling unit use to assign it implement an innovation process of the strategy of economic development.

# CONCLUSION

Innovation is a broad concept. Innovation is not in contradiction with tradition. Any type of entrepreneur, even when working in traditional sectors or in businesses with strong traditions such as family businesses can be innovative with the product, the production process or any aspect of doing business. The degree of innovation is monitored by policy makers. A high degree of innovation is considered to make the economy more 'competitive'. Innovation will not only support the development of new products or increase the productivity of labor and capital, but also bring more economic growth, employment, a better balance of payments, improve the labor conditions etc. There is a series of measures that can facilitate the maintenance of SME' innovation in order to operate further more competitive and playing a more important role on the autochthonous market, even if sometimes this matter is unrealistically neglected.

This innovation process is based on defining groups of companies having similar sets of scoring values and for validation are applied there types of risk management (reactor, defender/prospector, analyzer) in contrast to the original four types of Bayer and Gann (2007). As justified by the scoring approach, this category led to merging of the two central types of Bayer and Gann into one. Empirical SMEs research in Romanian faces several problems. Regarding size classes, the research object of Romanian SMEs has a very homogeneous structure. This study aims at covering the total range of SMEs including also the class of micro firms. So, for future studies it would be interesting to focus exclusively on the class of micro firms. Such a research project would require investing considerable time in collecting data.

We certainly have many casualties among SMEs due to the incorrect application of innovation process, as we will have winners of the crisis, and the winners will be those who will be able to make accurate forecasts on medium and long term and manage the risks. The results of questionnaire and interview deliver that the company size is an essential factor to distinguish the sophistication of Romania innovation systems. Another factor for judging innovation of SMEs is the personality of the owner or the Romanian managing director. Here the educational background and the interest business management topics play an important role, with owner-management showing more deficits than other managers. The interviews have revealed that some Romanian owner-managers have quite a fatalistic attitude toward innovation process. With increasing company size the problem becomes dramatic, but regulations for replacement and succession are generally established badly. It is not easy to measure innovation. Businesses operate in international markets while policy makers focus on a territory. Very often the effect of a policy is felt beyond the territory of the government. In a large area such as the European Economic area there is much interdependence and many spillovers. This is especially the case in a small open economy operating in this type of market as is illustrated by the case of Romanian. In conclusion, the influence of innovation in the strategy of Romanian SMEs development economic is mixed, both negative, by the superior concurrence, the increase of the turbulence of the businesses environment, and positive, facilitating the access at new markets of provision and sale, the acceleration of the know-how transfer, the access at new technologies, partnerships and strategic alliances at international level, etc.

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# ABSTRACT

The purpose of this study is call for further academic conversations into how to practice common sense leadership in a 21<sup>st</sup> century organization. This qualitative study was performed from July 29<sup>th</sup> through December 7<sup>th</sup>, 2010, which involved 26 participants from across the United States who were identified as senior leaders in their organization. These executives indicated that leading by example; managing your human assets; doing the right thing; seeing the big picture; developing a plan for the future; and making the right hiring and transitional decisions were key common sense leadership best practices. Participants concluded that common sense leadership is a full, hands-on effort, which requires attention to every detail of the business from financial to human asset management toward all members of the organization.

JEL: M12, M15

KEYWORDS: Leadership, Human Assets, Common Sense Leadership

# **INTRODUCTION**

Our previous study (Webber, Goussak, & Ser, 2012), examined how 26 senior leaders defined common sense as it relates to the 21<sup>st</sup> century organization. Their conclusion was that while there was no agreed upon term that best describes common sense one could readily recognize its imprint on organizational practice (Webber, et al.). The following summarizes the findings of the second question asked of this group: "What are some common sense, best practice leadership examples you could provide from your lived experiences as a senior executive"?

# Research Background

As was noted in the previous work (Webber et al., 2012), the researchers first pursued this line of inquiry after one of the authors made some observations on emerging leaders in Eastern Europe who seemed to embrace Western management practices but did not seem to understand how to move their learning into actual practice. Common sense was then theorized to be the hitching post that would help leaders in the former Soviet bloc nations to connect with a different paradigm that they asked to be adopted. Additional thoughts on other developing countries facing similar challenges led researchers to review common sense leadership understanding and practice among the kinds of leaders who were thought worthy of emulation because of their background and moral authority. It is acknowledged that before the study was undertaken, the researchers made an assumption that common sense was a term that was widely understood and identified by practitioners in the leadership field. However, after an exhaustive search of the literature, it was discovered there was no universally acceptable definition that could benchmark such behavior within an organizational setting. This finding was also echoed by the senior leaders who revealed their answers when asked about similar matters involving their companies (Webber et al., 2012).

The participants in the previous study revealed that common sense could be recognized among three predominant groupings, which guided how these senior leaders determined what was and was not included within the broad research question. These areas were identified as goal setting, decision making,

and motivation (Webber et al, 2012). In order to open up further dialogue on how the leaders interpreted the jargon, the same participants were then asked a second question related to common sense practices. This added level of inquiry further helped the researchers pinpoint how the terminology was embraced in the workplace by those recognized its existence. Once it was determined that common sense was the principle connector between leaders and organizational best practices, the next step for the researchers was to investigate the nexus between such areas. Unlike the previous study where there was not an agreed upon determination of the terminology's meaning, participants in this second study were able to provide examples from their experience, which revealed why they believe common sense leadership is relevant within the context of their current operating structure. Their responses provide some interesting talking points for further research and academic dialogue.

# LITERATURE REVIEW

The study of common sense leadership appears to be relatively new to the literature. Webber, Goussak and Ser (2012) found that common sense leadership cannot be defined in one single way, but as a compilation of three different traits: (a) goal-setting, (b) decision making and (c) employee motivation. One approach for applying common sense in leadership is to understand the depth of the traits identified in our previous study. Goll (1993) found that respect drives leadership and popularity supports respect and not the reverse. Management by Values (MBV), a theory developed by Goll, is a leadership model that falls under the behavioral leadership approach consisting of a mix between each of the Scott (2003) perspectives. Scott (2003) believed that behavioral leadership originated from three distinct perspectives: (a) the rational system, (b) the natural system and (c) the open system. Rational system theories center on the attainment of goals. As found in the previous study, goals were a critical component of common sense leadership because an organization must center on a specific direction. Models of rational systems theory depend on a formal process and set of procedures towards accomplishing organizational goals.

The goals of the individual are not a concern under rational system theories. Natural system theories emphasize organizations as collectives (Scott, 2003). In contrast to rational system theories, natural system theories acknowledge that organizations differ in their goals and methods for attaining those goals. This concept was also confirmed by our previous study because a balance is necessary between attaining goals and making decisions that affects both the organization and the individuals that service that organization. According to Scott, the open systems perspective is more flexible than the rational or natural systems perspectives. The primary difference between the open systems perspective and the other perspectives is the affect of the environment in the operational and leadership process.

MBV represents a philosophy incorporating a number of styles and concepts working in conjunction with one another in order to maximize benefits for any organization's success. The central premise of MBV is the *action triad*. The action triad consists of three components: (a) norms, (b) values and (c) goals (Goll). MBV is a balanced approach to leading in the 21<sup>st</sup> century. The balance between the norms, values, and goals of the organization in conjunction with the members of the organization is critical to long-term success and an important component of balancing the three traits of common sense leadership. Prior to MBV, academia and business relied on such theories as Management by Directing (MBD) and Drucker's Management by Objectives (MBO) (Goll, 1993). According to Goll, the problem with the earlier theories was the weight given to participants that are more aggressive and lesser consideration to less aggressive members in directing an organization (Goll). How the organization balances each of the three elements of the action triad will determine the influence and quality of the people that make up the organization. A strong consistency between each of the elements will influence the overall quality of the organization's environment (Goll). Although not the first element, values are the foundation of MBV because they give meaning to the organization and everything that the organization does.

Values are not necessarily achieved goals, but are standards by which we live. According to Goll, values determine the direction and manner in which people behave. Values focus an organization on the question of "why" (Goll, 1993, p. 7). Webber et al. found that common sense leadership begins with an understanding of the individual team members values and uses those values to determine what motivates people in order to make the necessary decisions to achieve organizational goals.

Goals provide the tangible *what* of the organization, "the physical manifestation of the organization's values" (Goll, 1993, p. 8). In the MBV model, goals equate to the rational system of organizational behavior. The key focus of the goal component concerns the reason for organizational existence. Goals provide a quantifiable purpose for organizational direction. The balanced management approach of MBV takes the concept of goal attainment to the next level. Under MBV, the goals of both organization and the individuals involved in the organization are equally important. The responsibility of the organization's leadership involves determining the needs and desires of the members of the organization in order to focus on specific organizational goals. Norms enhance and protect the values of the organization.

According to Goll (1993) the norms in an organization, "place certain limitations on behaviors of persons within the organization" (p. 9). The norms of an organization relate to Scott's rational system of organizational behavior. At some point in the process, an organization prescribes how to accomplish the organization's goals and objectives. In order to understand MBV, a leader focuses on understanding each of the elements that make up the action triad. It was this philosophy that guided the original study by Webber, Goussak and Ser. Common sense leadership utilized a rational approach to demonstrate a focus on the goals of the organization in conjunction with the needs of the team (employees). Understanding MBV and the balance of the action triad could help management understand how common sense leadership helps promote a positive environment within the organization resulting in successful organizational productivity.

# DATA AND METHODOLOGY

This qualitative study on providing best practice, common sense leadership examples was performed from July 29<sup>th</sup> through December 7<sup>th</sup>, 2010. It involved 26 participants who were identified as senior leaders in their organization, which meant the participants were at least a Vice-President to be considered for inclusion in the study. A convenience sample was used, which involved individuals from both the public and private sector. The study included leaders from information technology, insurance, investment, legal services, manufacturing, marketing, public utilities, real estate, restaurants, and staffing. Participants were polled from Georgia (50%), Nevada (23%) and other regions of the United States (Alabama, Connecticut, Florida, Maryland, Minnesota, North Carolina, and Pennsylvania). SurveyMonkey.com was used as the platform for the participants to provide their viewpoints on this issue (Webber, et al., 2012).

# **Findings**

Similar to what we discovered when we asked the same group of people questions to direct us toward how common sense was recognized Webber, et al., 2012), this group pointed to six predominant groupings they felt represented the best practice common sense leadership principles that transformational organizations could apply: (a) Leading by example, (b) Managing your human assets, (c) Doing the right thing, (d) Seeing the big picture, (e) Making the right hiring and transitional decisions, and (f) Developing a plan that works.

# Leading by Example (LBE)

Participants noted that common sense practices begin with leaders doing what they ask others to emulate. CS3 opined that it starts with not allowing superiors to get caught up in the success of the moment and "continually move the bar". CS 13 added that in their industry it means to model the kind of behavior that they want employees to follow so agents empathize with their customers and fully explore their actual business needs. CS 14 connects this with "always provide just a little bit more, which is tough in this

competitive environment". They go on to note that for "customers/clients, understand what they need and want before making a commitment". CS 15 likens these to how "treating others with kindness and respect garner more in terms of productivity and quality work than other forms of management. Leadership should inspect what it expects". One way this is done, according to CS 18, is by discovering "that success is achieved when I am out front, leading by example, while truly listening to my associates and giving them proper credit and rewards for their efforts". When things do not go right for the organization, CS 20 suggests that leaders accept the mistakes and move on. Leading by example starts at the top of the hierarchy, too. CS 24 frames it in terms of "the best leaders still aspire to consistently [provide] an ethical, honest, trustworthy example of servant leadership in which they value the people with whom they work as important to their overall success in business and life".

Finally, CS 26 notes five keys to leading by example, which are best common sense leadership practices: 1. Remain positive even in the presence of what appears to be extreme negative. 2. Inspire others to kindness, decency, and the Golden Rule. 3. Act today as if someone is writing down all of your deeds and you'll have to read the book of our life out loud in 10 years to a room full of people, 4. Fairness is the basis for all human activity. 5. Relentlessness and perseverance are traits that will frequently trump others. CS 13 likens this to being a Boy Scout leader where "adult leaders who would go out of their way to show the scouts and interesting project, or tell an engaging story, or ask about their lives were the adult leaders who had a keen common sense that the boy scouts responded to" in a positive way.

#### Managing Your Human Assets (MHA)

Common sense leadership engages the organization through the management of its human resources. There were a number of short responses in this area but it shows these participants interest in good fiduciaries of the human wealth that they invest in on a daily basis. Rules and regulations are considered the hallmark of how organizations function but CS 6 notes "sometimes it's okay to bend company policies depending on the situation; especially as it relates to employee retention and management". In other words, while guarding the ethical stronghold of the organization there are times where, as CS 16 notes, "sometimes common sense has to trump policy. Therefore, be sure you have people in positions of responsibility and authority who have good common sense".

Goleman's (1995) emotional intelligence ideas came up several times among participants in knowing how to manage one's followers. For example, CS 7 likened common sense leadership best practices to "understanding human nature and how that plays a part in determining the strength and weaknesses of an employee and knowing how to play to their strengths". CS 10 adds that means not worrying "who gets the credit. Team members work twice as hard when they believe they have ownership of the project". CS 15 connects this with common sense understanding that "you are only as good as the people you work with". Communication is a vital part of the area of managing one's assets. CS 9 notes that means providing timely feedback and coaching for times when the follower has both positive and negative performance. CS 19 adds that means one needs to "be a better listener than a talker". To keep the communication lines open, CS 20 notes that means to keep an open-door policy and to use social media to allow different channels of communication. CS 26 adds two rules to this section: 6. Communicate clearly and with the audience/listener in mind. 7. Getting people to happily get where you want them to go on their own.

# Doing the Right Thing (DRT)

This area of inquiry matches similar statements made in our previous study when we asked the same group to define what common sense leadership meant to them (Webber, et al., 2012). Moral and ethical considerations were highlighted in areas such as "live your values and be of good character. Walk the walk and talk the talk. Do what you say you will do" (CS 1) and "think of what you are going to say before you say it; don't do things that knowingly can get you fired or in jail. Check your ego before you make a decision" (CS 4). What this means is common sense leaders need to set up an organizational environment where "before a decision is made [one should] evaluate the effect it has on others and whether you could be proud of the decision. Evaluate what is being considered and if it meets the

company values and objectives" (CS 17). Within such a setting, the leader needs to celebrate accountability and openness; high moral, ethical and customer service standards (CS 20) and "integrity, courage, honesty, and reliability (a practical application of integrity, actually)(CS 21). CS 19 say this all boils down to treating others as you would like to be treated, which points us back to the Golden Rule.

#### Seeing the big picture (SBP)

Participants note that common sense leadership application also lends itself to good macro-management practices. CS 8 believes that it is just as important to not what to say no to as what an organization decides to move forward with. They note that "choosing wisely what to ignore frees up bandwidth to work on the meaningful stuff". CS 12 says it comes down to placing before the company the items that are important for them to succeed and to grow the business. CS 25 adds that a good understanding of budgetary data is a key ingredient in helping both leaders and followers to move the organization in a positive direction for the future. Competition also came up as a consideration in the study. CS 14 notes it starts knowing how your product or service compares with your competitors and then operate in an environment where it is your privilege to provide such items to your customers. CS 5 cautions, though, that one should be careful in seeking alliances with competitors, which might undermine one's own profitability. CS 24 puts everything in perspective by noting common sense leadership practices work best when there is a personal balance between "one's home and family with work, leisure, and inspirational growth". This means "spending lots of time with one's leadership team so that the cultural principles of the organization are so strongly inculcated that the team can make independent decisions that are in keeping with the principles of leadership".

#### Developing a plan that works (DAP)

Another area involves what participants see as common sense leadership planning best practices. CS 8 sees this as a role issue where the CEO deals with "what if" and the COO deals with "what is". CS 3 notes that leaders do this through a regular review of progress being made in comparison with documented goals. CS 20 points to staying ahead of the game by looking ahead at least two years ahead in relationship to required staffing needs and operational needs. When doing this, CS 22 advises to keep "the product simple and [have] the marketing align with the needs of the consumers". Planning means to consider not the boom years of the organization as well as the ones where potential ruin is possible. CS 23 sees this in relationship to a small business manager who sensed the downturn in the economy and began reducing various expense categories in anticipation of a lessened cash flow. By doing so, layoffs were not needed and his company was able to maintain market position. CS 26 adds these final words of wisdom by noting that common sense leadership practices involve: 8. [The] vision to see what is currently not visible and [the] faith to not pay attention to what everyone else is looking at. 9. Commonness is a very uncommon manner.

# Making the Right Hiring and Transitional Decisions (MRH)

The start and end of individual hiring decisions is a tough one for any leader and common sense leadership practices especially when the future outcome of the organization may rest in that person's productivity and connection to the established cultural beliefs. CS 3 notes the process should start with picking the best and brightest people who help drive the organization's success. CS 8 adds that leaders should not confuse a good match in the job description categories with people who are talented. CS 24 says there is no substitute "for hiring the best people and investing the time and resources into them to develop their full potential. On the back side of employment is that moment when the person becomes a liability for the organization due to cutback or poor performance. CS 2 notes there are times when you just have to as a common sense best practice terminate someone who is no longer a good fit with corporate goals. There are also rough economic times when, through no fault of their own, the employee cannot be kept on the payroll because of poor income flow. In such times, CS 14 believes that organizations have a responsibility to pay for outplacement services as a wise exit strategy to bring closure to the relationship.

# CONCLUSIONS

There were six areas that the study identified as the top common sense leadership best practices that leaders should model, What is interesting to note is that the actual number of responses did not always correlate with how much was actually written on the subject. For example, while *Managing your human assets* tied in the number of actual posts submitted (9) the second place number of lines written about common sense leadership best practices was *Seeing the big picture* (20). The same thing happened with the number three responses of *Doing the right thing* where the third place number of lines written about the subject actually went to *Developing a plan that works*. The following tables show both the total number of responses and number of lines written about them for each of the six study areas.

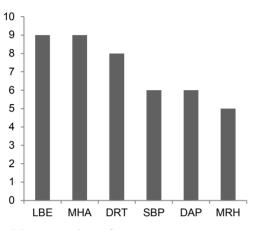


Table 1. Number of responses per category

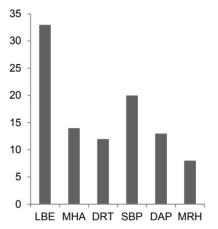


Table 2. Number of lines of response

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# ABSTRACT

The process of calculating market clearing prices for cap and trade policies for air quality remains problematic. The permit trading processes are designed to mimic the cost-minimizing outcome. An additional shortcoming is the lack of attention to elements of uncertainty in the permit price calculations. In this paper we design a market process for allocating permits to achieve the same type of behavior we observe for each decision maker in the overall cost minimization model. We use a method known as a computer assisted "smart market," which has been used in a number of electricity pricing situations. This approach has been proposed and applied also to some types of environmental and resource management problems. We provide the theoretical structure of the "smart market" model with a safety margin and the elements of the margin of safety are explored in depth. Also a set of pricing rules for the permits that reflect a margin of safety are examined.

JEL: Q25; Q28; Q58

**KEYWORDS:** environmental pollution policies, air pollution, permit trading, smart markets, margin of safety

# INTRODUCTION

In the early 1960s Coase (1960) argued that property rights could be used to develop a market-based policy for pollution control if the property rights for environmental assets were made explicit and transferable. The practical applications of Coase's argument were developed by Dales (1968) for water and Crocker (1966) for air quality. Tietenberg (2006) provided important contributions by relating the property right definition to the type of a pollutant. One type of pollutant is the uniformly mixed assimilative pollutant. Its important characteristic is that the environment's ability to absorb it is significantly large relative to the emission rate, so the pollutant is not accumulated over time. For this type of pollutant the ambient concentration depends on the emissions, but not on the spatial distribution of the emissions within an air shed will produce approximately the same effect on the pollution target. One example of this type of pollutant is greenhouse gases, since their contribution to the climate change is thought to be independent of where they are emitted into the atmosphere (Tietenberg, 2006).

The second type of pollutant is the non-uniformly mixed assimilative pollutant. Its important characteristic is the location of the emissions releases with respect to the pollution policy target. In general, the policy target is stated in terms of an upper limit on the permissible ambient concentration level at specific receptor locations. Location is important because ambient concentrations are sensitive to the source clustering as well as to the level of emissions. Clustered or highly concentrated sources are more likely to trigger violations of an ambient concentration limit than dispersed sources with the same aggregate emissions rate because the clustered emissions would be

concentrated in a smaller volume of air. Examples of non-uniformly mixed assimilative pollutants include total suspended solids, sulfur dioxide, and nitrogen oxide (Tietenberg, 2006).

The objective specified for cap and trade policies is cost minimization, while the policy target depends on the type of pollutant under evaluation (Tietenberg, 2006). In case of a uniformly mixed assimilative pollutant, the policy target is the level of aggregate emissions, or the total weight of emissions released to an environmental medium such as air. A legal limit is established for the allowable weight of emissions and then the responsibility for meeting the target is based on the cost-effective criterion. The key result here is that the effective allocation of pollution control responsibility requires the equalization of marginal cost. The property right that is traded for the cost-effective solution for the uniformly mixed assimilative pollutant is then an emissions permit. Tietenberg (1980) classifies this as an undifferentiated permit (UDP), when the same entitlement to emit is given to every emitter and the trades among emitters are carried out on a one-for-one basis.

The non-uniformly mixed assimilative pollutants, can be described as local pollutants (Tietenberg, 1980) because the damage they cause is related to their ground level concentrations in the air. Their concentrations are based upon the relative location of emitters, the process of accumulation within the environment and the amount of emissions emitted. The policy target level or cap for these pollutants is stated as an ambient concentration limit, which is measured at a specific location for a specific averaging of time. As noted previously with respect to this type of pollutant, the contribution of any individual emitter at a particular location depends on the emitter location with respect to a particular receptor location and the flow characteristics of the environmental medium between the emitter's site and the monitoring (receptor) site. Tietenberg argues that the ambient cost-effective (ACE) criterion requires that the responsibility for pollution abatement was allocated among emitters so as to minimize the cost of meeting the ambient standard as measured at specific monitoring points. The key result for this environmental problem is that the marginal cost of emissions reduction should be equated with a weighted average of the marginal cost of concentration reductions at each receptor point.

The property right traded for the cost-effective solution in the case of this kind of pollutant is an ambient permit, which is traded in an ambient permit system. An ambient permit market is then defined with respect to each receptor location. Each emission source has then to hold a portfolio of permits that legitimize its emissions rate. Ideally, the policy target for the cap and trade policy is that the permits would be traded in a competitive market that yields a cost effective outcome for a given value of the cap or policy target. Montgomery (1972) has shown in a rigorous manner that instantaneous multilateral trading of permits will yield a competitive equilibrium that coincides with the cost-effective outcomes. However, the existing literature in the area has little to say about two important components of the air quality policy problem. The first one is related to health risk and uncertainty. Lichtenberg and Zilberman (1982) and Harper and Zilberman (1992) used a safety-rule model structure as a way to introduce health risk and uncertainty into the environmental regulation framework. Ellis et al. (1985) and Batterman and Amman (1991) used a safety-rule model structure to address the acid rain strategies. The second issue is related to how to compute the market equilibrium clearing prices and efficient allocation of permits. Alternatives, which can be considered, include having a market coordinator, acting like a Walrasian auctioneer, or to use a direct a centrally controlled permit market to set ambient and discharge prices.

In the paper we design a market process for allocating permits to achieve the same behavior that is observed for each decision maker in the overall cost minimization model. We use a method known as a computer assisted "smart market," which has been used in a number of electricity pricing situations. We provide the theoretical structure of the "smart market" model with a safety margin. In the following section the smart market with the margin of safety is presented and consequently the elements of the margin of safety are explored. Then a set of pricing rules for the permits that reflect a margin of safety are examined and the issues related to their implementation are explored. Finally, we conclude the paper.

#### The Initial Market Model

C----------

We assume that the property right to be traded is an emission discharge permit (EDP) in an emissions discharge permit system (EDPS), which is similar to the system discussed in Atkinson (1983). Further, it is assumed that emissions are traded at a national or regional level and the regulation is used to achieve local ambient air quality standards. This policy is an example of regulatory tiering and is similar in some respects to the U.S. Sulfur Allowance Program (see Tietenberg, 2006).

The decision problem for an emission source (firm) in the presence of an EDPS is equivalent to minimizing the cost of controlling emissions. The cost minimization problem for an individual source (firm) can be formulated in the following way. Let *i* represent the discharge source (i = 1, ..., I), *j* is the receptor location or monitoring point (j = 1, ..., J),  $e_i$  are untreated emissions released by source *i*, and  $d_{ij}$  the transfer coefficient for source *i*, receptor *j*. In addition, let  $l_i$  represent the volume of EDPs purchased by firm *i* and  $P^e$  to be their price. The emissions reduction or abatement cost function for firm *i* is represented by  $C_i(e_i)$  with  $C'_i(e_i) < 0$ . The decision problem for each firm *i* with respect to abatement and purchasing EDP is then the following:

$$Min \qquad C_i(e_i) + P^e l_i \tag{1}$$

Subject to 
$$e_i \leq t_i$$
 (2)

Equation (1) represents the total cost of abatement for firm i, while equation (2) indicates that untreated emission releases must not exceed the *i*-th firm's purchase of EDPs. We assume that the individual decision maker does not have information on the set of aggregate stochastic relations nor on the environmental decision makers' uncertainty aversion parameters. The marginal conditions for the *i*-th firm's equilibrium for emissions reduction and also for the purchase of EDPs can be formulated as follows:

$$-C_i'(e_i) = P^e \tag{3}$$

$$e_i - l_i \leq 0 \tag{4}$$

$$P^e(e_i - l_i) = 0 \tag{5}$$

Equation (3) indicates that each firm *i* emitting emissions equates the marginal cost of emissions control with the market price of an EDP. Equations (4) and (5) state that firm *i* must cover its total untreated emissions with the purchase of EDPs. The i - th firm's decision to purchase or sell EDPs follows from the equation (3). First, assume that  $-C'_i(e_i) > P^e$ . In such situation, firm *i* has an incentive to increase its emissions (i.e. reduce emission control) and purchase EDPs until (3) is reached. Alternatively, let us assume that  $-C'_i(e_i) < P^e$ . Then firm *i* has an incentive to reduce emissions releases (i.e. increase emission control) and sell EDPs until (3) is achieved. Let's assume that the EDPS market consists of *I* firms, each of which will have some level of emissions control and untreated emissions release. The EDPS market equilibrium is characterized by each firm having a set of equilibrium conditions analogous to equations (3)-(5). In addition, the following market clearing condition is required:

$$P^{e} \sum_{i=1}^{r} l_{i} = 0.$$
 (6)

Equation (6) guarantees that total expenditures are equal to total permit revenues among all firms by an accounting identity (Atkinson, 1983). The equilibrium outcome described by equations (3)-(6) does not account for the possibility of hot spots. The solution of this would be to adjust the total number of permits after observing actual air quality measured at various receptor locations, or use the air quality diffusion model. A key observation is that EDPs are unrelated to ambient degradation, so ambient standards will not initially be satisfied by equations (3) except if it happened by chance. This concern can be addressed by imposing on EDP trades the trading rules. However, these additional regulatory actions can increase the complexity and the administrative and transactions costs.

In theory, the market-clearing price  $P^e$  in an EDPS corresponds with the cost-effective shadow price associated with the cap imposed emissions. But the process of actually solving an EDP market model for market-clearing prices remains problematic. Thus, we should look into the ways of finding a set of optimal prices that can ration permits relative to each firm's emission control cost function while satisfying all environmental and other relevant constraints. Ermoliev et al. (2000) argue that a market coordinator, acting like a Walrasian auctioneer, could direct a centrally controlled permit market to a set of ambient and discharge prices. The Walrasian auction is not necessary if emitters can provide a central market coordinator with the information on quantities of EDPs to be traded at each possible price.

In this case it is possible to determine optimal prices and allocation of EDPs using a computer-assisted smart market model. This type of market allows for the pricing and allocation of resources in technologically interdependent environments. The basic idea is based on the combination of information and advantages of economic incentives derived from a decentralized property rights system with the coordinating advantages of the central processing based on an optimization process. The optimization data requirements include willingness-to-pay demand, willingness-to-accept supply, budget, capacity and other problem-specific constraints. The data are provided by the decentralized decision makers, whenever price and allocation decisions are needed. The central processing is based on the application of optimization algorithms to the submitted bid-offer messages to determine the prices and allocations that maximize net gains from exchange. These types of markets have been used in natural gas and electricity markets (McCabe et al., 1991) and in water quality management problems (Prabodanie et al., 2010, 2011). On the example of the Israeli water sector Becker (1995) used a similar type of model structure to consider the value of moving from the central planning to the market system. In general, the market is a periodic auction that is cleared using mathematical programming techniques. Pricing information is based on a range of shadow prices generated from the mathematical programming model. The smart market is operated by a market manager, and the trades are to or from a pool rather than based on bilateral trades.

# The Smart Market Programming Model

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Our smart market linear programming model is based on the following assumptions. First, we assume that the bid functions for each emitter are discrete functions with each step being called a tranche. The index for each bidding firm's tranche is denoted by the index n (n = 1, ..., N). The trading activities are assumed to account for the possibility of hot spots occurring spatially, so we include ambient air quality standards at various receptor points in the model. Let  $Q_j^0$  represent the ambient concentration level at the receptor location j,  $B_{in}$  the size (quantity) of the bid tranche n submitted by the bidding firm i, n = 1, ..., N accepted from the bid tranche n submitted by the bidding firm i, and  $l_{in}^b$  the quantity of EDPs accepted from the bid tranche n by the bidding firm i. The basic smart market model formulation is

$$\sum_{i=1}^{I}\sum_{n=1}^{N}P_{in}^{b}l_{in}^{b}$$
(7)

#### subject to

$$\sum_{n=1}^{N} l_{in}^b = l_i \tag{8}$$

$$= 1, \dots, I$$
 ( $\theta_{in}$ ) (9)

$$(\rho_j) \quad (11)$$
$$-l_{in}^b \le 0$$

$$(n = 1, ..., N)$$
  
 $(i = 1, ... I)$  ( $\psi$ ) (12)

$$Pr\left\{\sum_{i=1}^{J} d_{ij}l_i \leq Q_j^0\right\} \geq (1 - \alpha_j)$$
$$(j = 1, ..., J)$$
$$\sum_{i=1}^{J} l_i \leq \bar{l}$$

(i

The variables in parentheses to the right of equations (8) - (12) are Lagrangean multipliers. The objective function equation (7) represents the joint net economic benefits of undertaking the permit trading assuming that the constraints on ambient concentration standards at a range of receptor locations are satisfied. The linear programming model is defined as a gross pool formulation. This formulation is independent of the initial distribution of permits (Prabodanie et al., 2011). The bids reflect the additional quantity of EDPs preferred at each price by a bidder if there are no initial holdings. The linear programming model is solved and the optimal quantities are found, the net buyers and sellers are determined by the final position and initial position of EDPs for each bidder. Firms adding to their initial position are net buyers and those, who have reduced the initial level of the EDP holdings, are net sellers. The payments and receipts are calculated from net receipts.

The coefficients  $P_{in}^b$  in the objective function equation (7) indicate how much each block of EDPs is worth to the bidder. The constraint (10) indicates that the quantity of bids accepted in each bid tranche cannot be negative. The constraint (9) places an upper bound on each tranche, ensuring that the quantity of permits cleared does not exceed the maximum specified by the bidder. The equation (8) represents an allocation constraint, which specifies the quantities of EDPs accepted and the final permit positions. The constraints (11) are spatial constraints, which represent the capacity restrictions on the market, because they restrict the tradable resource capacities. Alternatively, these constraints are designed to control for spots that might occur at the respective receptor points. The constraint (12) states that the total number of EDPs purchased cannot exceed the total number of permits issued by the environmental authority.

The presence of emission releases and their spatial transport to various receptor points is modeled in a stochastic manner as shown by (11), which represent "chance constraints." The expression  $(1 - \alpha_j)$  is defined as an exceedance probability for the air pollutant at receptor location j ( $0 < \alpha_j < 1$ ). These probabilities are assumed to be determined exogenously by the environmental policy decision makers, given their aversion to uncertainty. The stochastic specifications in (11) include the transfer coefficients  $d_{ij}$ . The distributed parameter simulation models can be used to estimate the expected values and probability distributions of the transfer coefficients (Ellis, McBean and Farquhar, 1985). The ambient

concentration standard  $Q_j^0$  is also assumed to be stochastic. The equations (11) must be converted into a more convenient form for solving the model as a mathematical programming problem. The following assumptions are used in this process. First, the  $d_{ij}$  and  $Q_j^0$  are assumed to be normally distributed with their means being  $d'_{ij}$  and  $Q'_j$ . In addition, both sets of parameters are assumed to be statistically independent. These assumptions allow us to rewrite (11) as follows:

$$\sum_{i=1}^{I} d'_{ij} l_i + \varphi_j [\sum_{i=1}^{I} \sigma_{ij}^2 l_i^2 + \varepsilon_j^2]^{0.5} \le Q'_j \qquad (\rho_j) \qquad (13)$$
$$(j = 1, ..., J)$$

where the  $\varphi_j$  are critical values of the standard normal distribution exceeded only with probabilities  $(1 - \alpha_j)$ . The smart market model with a safety margin now consists of the maximizing equation (7) subject to (8), (9), (10), (12) a (13). The information on the market-clearing EDP prices can be found from the first order necessary conditions for the smart market model. Let us first assume that none of the receptor constraints represented by (13) is binding, but the constraint (12) is binding, which we will assume for the remaining part of the discussion. In such a situation we can conclude that

$$\boldsymbol{\pi}_i = \boldsymbol{\psi} \tag{14}$$

for all i (i = 1, ..., I).  $\psi$  is the shadow price for the EDP constraint. It indicates the reduction in the emission control costs, if the environmental authority were to add one additional EDP to the total number of permits in the market. This shadow price is the market-clearing price in the EDP market and in this case all firms pay the same permit price. Now assume the constraint (13) being binding. In such a case we have the following condition:

$$\pi_{i} = \psi + \sum_{j=1}^{I} \rho_{j} \left\{ d'_{ij} + \varphi_{j} \left[ \sum_{i=1}^{I} \sigma_{ij}^{2} l_{ij}^{2} + \varepsilon_{j}^{2} \right]^{-0.5} \sigma_{ij}^{2} l_{i} \right\}$$
(15)  
$$(i = 1, ..., I)$$

The equation (15) shows the shadow price with included uncertainty. The variable  $\rho_j$  is then the shadow price for the health risk-based ambient concentration standard at the receptor location j as well as the uncertainty of this standard. If the ambient concentration standard at the receptor location is reduced by one unit, given a particular level of uncertainty  $\varepsilon_j^2$  for  $Q_j^0$ , the level of the trading surplus given by (7) is reduced by  $\sum_{j=1}^{J} \sum_{i=1}^{I} \rho_j d'_{ij}$  across the firms given all monitoring stations, where the constraints are binding. On the other hand if there is an increase in all  $\varepsilon_j$ , the marginal opportunity cost of the error in the health risk based ambient concentration standards is measured by  $\sum_{j=1}^{J} \sum_{i=1}^{I} \rho_j d'_{ij}$ .

#### CONCLUSIONS

We have designed a computer assisted "smart market" model for allocating the permits so as to achieve the same type of behavior we observe for each decision maker in the overall cost minimization model. We have provided the theoretical structure of the "smart market" model with a safety margin. Also, the elements of the margin of safety have been explored in detail. We have also looked at the pricing rules for the permits that reflect a margin of safety. We believe that this approach represents a useful addition to the existing smart market literature. However, the issues of the implementation of this approach aimed at addressing environmental problems need further consideration. The relevant empirical evidence to test the model could be obtained by its preliminary testing in the experimental settings. This remains the open venue also for our future research.

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# ANTHROPOMETRY IMPACT IN THE DESIGN OF MILITARY EQUIPMENT

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# ABSTRACT

The design technique is necessary to take into account the characteristics and innate human skills because they do not change substantially in time and space, so that human engineering must start from the dimensions, possibilities and limitations of human being. Increasingly for body size and its weight and anthropometry modern studies have led to continuous improvement of measurement tools and techniques so that data collected meet those requirements clearly and accurately.

**JEL:** M11, M12

KEYWORDS: anthropometry, ergonomics, human resources, design, technique

# **INTRODUCTION**

Combat equipment is highly complex characterized, with mechanisms which ensure greater effectiveness and a great power of destruction. The design of combat equipment must consider the human being possibilities, being essential and mandatory, because regardless of the type of structure and use of fighting, they are served by people who have limited mental and physical qualities. Taking into account the military opportunities, they should be given special importance, as technical mismatch between man and technique, between man and his work, cause status stress, errors in daily activity, low performance. Anthropometry used in military ergonomics intends that all people be able to work with any combat equipment, by designing early design phase of adjustment possibilities size technique appropriate to performers requirements. Discomfort restricting the possibility of driving, inefficiency, risk of injury, can be removed from the design. Application anthropometry in design must be based on a number of methodological requirements and general principles such as:

- Consider man as an integral part of system design. This principle considers man an essential, central component, of system design, involves designing junctions between humans and other technical components (machines, desktop or control panel, furniture, tools, safety equipment). This means that dimensional and functional features of human should be considered from the first phase of the development of any design system;
- Giving priority to operational or functional aspects. Human operator must imagined and study relationship of techniques;
- Knowledge and interpretation of variability. Dimensional variability of man is determined by a number of factors of variability of internal order, hereditary (age, sex, race, people) and amplified by many factors of variation acquired (external), such as occupation (profession), nutrition, health physical activity, position work clothing and protective equipment;
- Providing an indication of space tolerances allowed for people and equipment. This principle of applying anthropometry in ergonomic design takes into account any specific conditions that may perform work or other voluntary body modifications;

- Performance evaluation and accommodating of fully equipped man-fully equipped technique. Principle envisages that dimensional differences might be important, as subjects are measured with or without clothing worn with or without work equipment or protection. Thus, using different types of clothing (summer, winter) or protective equipment leads to not only weight gain, but that the size of which must be taken into account in ergonomics design;
- Promoting safety and health. This principle is fully aware that man (human resource) is the most important resource, today and tomorrow, all organization providing survival and development of their competitive success, which means that the resource (person) will be preserved in all ways and also through the preservation and promotion of occupational safety.

Man and combat equipment form a system where human and techniques functions are closely connected, so that it becomes impossible to solve the problems of this system correctly if we limit ourselves to consider only the technical aspects and neglect human factors and not heed human dimensions, size workspace settling from the basic dimensions (weight, height). The design phase should observe some general principles for the application of ergonomics as follows:

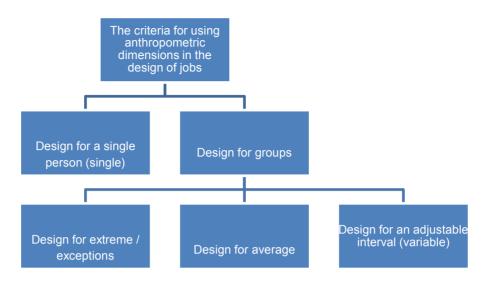
- Since the planning and design, stage must take out the possibilities and limitations of operator. Redesign is inefficient and has an expensive price of the product;
- The operator must use functional images. Designer makes human-technical system to start from functional dimensions;
- Need to take into account the variability of the human dimensions factors which are of internal order (hereditary) and external (environmental conditions);
- To provide proper limits of tolerance for people and equipment. Under stress, range of motion is always greater than the constant normal work;
- Accommodating and performance to evaluate fully equipped man.

The workspace is calculated according to the body size and we refer to:

- Weight, using as support in designing the stand, seats, parachutes, lifting and transport means;
- Height, a parameter necessary for designing: rooms, passageways, vehicles, overhead-arranged structures.

Therefore, as many specialists affirm such as Diego Gonzalez Maestro, knowledge anthropometric dimensions of operator are a fundamental element for design work systems. Anthropometry applications are not found only in designing work space but also in the media work (equipment, machinery, tools, environmental factors, etc.), information and signaling devices, personal protective equipment and protective clothing. The criteria for using anthropometric dimensions in the design of jobs are (Figure 1):

- design for a single person (single);
- design for groups;
- design for extreme / exceptions;
- design for average;
- design for an adjustable interval (variable).



This figure shows the criteria for the design of jobs. Figures were taken from G.D. Maestre, Ergonomia y psicosociologia, FC Editorial, Madrid, 2007, pp.137

Therefore, some difficulties in orientation of ergonomic design result from variations of human body dimensions, so that they cannot be established with the general and permanent validity, but they must be determined according to the concrete conditions of work and reviewed at least every ten years, taking into account the fact that, might arise some important changes. To be useful in ergonomics designing, anthropometric data must satisfy certain requirements:

- Measured human group must be representative to the operators who actually use military equipment;
- Samples must be large enough to ensure full extension results in well-defined socio-professional group which these samples from;
- Techniques able to be some specific purpose;
- Anthropometric data are not always sufficient for all requirements design. Experience should help the designer to evaluate existing data and to deduce from other dimensions required;
- It is necessary for the small operator be able to enter, and the large operator to fit.

So far, many project managers and designers are still reluctant to consider human factors as an essential and integral part of design. This is sometimes due to their lack of education in ergonomics. However, there is more than ever an evident progress in accepting this discipline in a wide variety of applications and processes. U.S. Army is particularly concerned with the implementation of ergonomics at each stage of the procurement process systems and devices. Just because every piece, tool, from a multi-billion dollar aircraft, aircraft carrier until the military boots, takes human factors engineering analyses before procurement, and throughout their life cycle. The lesson learned from the conflicts involving the U.S., determined to take measures to improve safety in the use of military technology for human systems integration to be initiated at the beginning of the procurement process, to ensure that human perspective approach to construct and use the military combat equipment that cannot meet requirements is needed? Since the World War II, military engineers and technicians have been smitten by a series of errors, difficult to explain, which military personnel commit in handling machines, devices and military equipment. Carefully errors analysis revealed that apparatus involved requests, especially the military operators,

surpassing their possibilities. Requirements modeling technique after human capabilities have led to a significant reduction of errors.

### CONCLUSION

In military training and especially in modern battlefield of military equipment, builders and designers must pay particular attention to the military term exposure to a hostile environment, which leads to lower capacity of perceiving the characteristics of combat, the ability to produce damage. Also due to concentration, radically reducing precision movements or actions, decisions, there is a loss of capacity of the military personnel to fight. Concordance between dimensions machinery, equipment or products and dimensions users is very important both for their use and in terms of human health and safety. Resources are used more effectively by matching personal skills with job requirements of each project; increasing individual performs, job satisfaction and thus decreases the number of those who want to leave the system.

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# DOES GENDER PLAY ROLE IN DECISION MAKING ON REGULATED MARKET?

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# ABSTRACT

Nowadays there is a big discussion connected with imposing of different forms of regulation on financial markets. Governments try to prevent individual investors from losing money in unexpected downfall. In our study we focus on the impact of financial market regulation on risk attitudes of men and women. We conducted laboratory experiment on risk taking under regulation on market at Economic Science Institute (ESI) of Chapman University. Our results support the outcomes of large scale surveys, whose results shown significant difference in risk taking among genders. Our empirical results show the difference in risk taking decisions on both, unregulated market as well as on regulated markets. Female subjects did not reflect the change in market settings into the change in their decisions. Male subjects increased their wagers in regulated market settings.

**JEL:** G11, G28

KEYWORDS: long term decisions, risk taking, financial market regulation

# **INTRODUCTION**

There is an amount of titles in economic literature which list reasons why government should intervene on the market. The most important ones are market failures and losses in efficiency. Possible way how to overcome market imperfectness and increase social efficiency is to impose regulation. Nowadays there is big discussion about introduction different regulations on financial markets. The area of our interest is to investigate the influence of regulation of potential losses on investment behavior. We focus on long term investment decisions (pension funds, long term savings accounts). In order to prevent individuals from losses caused by wrong decisions, governments impose market regulations on financial markets such as minimum pension, guaranties on savings (e.g. in the form of insurance). In presented article we refer to regulated markets as to the ones with imposed rules to "prevent" investors from losses of this kind.

Actually there is big discussion about the decision of European commission on equality between men and women in insurance procedures. This issue re-opens the question of gender connected influences on financial decision making. We decided to investigate the difference in investment between genders. Literature and academic studies based on field data tend to conclude that women are relatively more risk averse than men, whereas the laboratory experiments render inconclusive results.

# LITERATURE REVIEW

The existence of gender differences in willingness to undertake risks has been documented in a large number of questionnaire and experimental studies. One of the most cited is a meta-analysis by Byrnes, Miller, and Schafer (1999), which reviewed over 150 papers on gender differences in risk perception. They concluded that the literature "clearly" indicated that "male participants are more likely to take risks than female participants". Fehr-Duda and de Gennaro (2006) used for analysis abstract and contextual environment. They stated that gender differences in risk taking may be due to differences in subjects' valuations of outcomes or due to the way probabilities are processed. Published results of their experiment indicate that men and women differ in their probability weighting schemes; however, they did not find a significant difference in the value functions. Women tend to be less sensitive to probability

changes and also tend to underestimate large probabilities of gains to a higher degree than do men, i.e. women are more pessimistic in the gain domain. The combination of both effects results in significant gender differences in average probability weights in lotteries framed as investment decisions. The analysis concludes that women's relative insensitivity to probabilities combined with pessimism may indeed lead to higher risk aversion.

Different results where described by Harris and Jenkins (2006). They observed 657 participants and assessed their likelihood of engaging in various risky activities relating to four different domains (gambling, health, recreation, and social domain), and reported their perceptions of (1) probability of negative outcomes, (2) severity of potential negative outcomes, and (3) enjoyment expected from the risky activities. Women's greater perceived likelihood of negative outcomes and lower expectation of enjoyment partially mediated their lower propensity toward risky choices in gambling, recreation, and health domains. Perceptions of severity of potential outcomes were a partial mediator in the gambling and health domains. The genders did not differ in their propensity towards taking social risks. A fifth domain of activities associated with high potential payoffs and fixed minor costs was also assessed. In contrast to other domains, women reported being more likely to engage in behaviors in this domain. This gender difference was partially mediated by women's more optimistic judgments of the probability of good outcomes and of outcomes being more intensely positive.

In this paper we focus on long term investment decisions inspired by Benartzi and Thaler (1995) who were trying to answer the question: Why is the equity premium so large or why is anyone willing to hold bonds? Their answer is based on two concepts from psychology of decision- making. (1) loss aversion (the tendency of individuals to be more sensitive to reductions in their levels of well-being than to increases – summarized in prospect theory by Kahneman and Tversky (1979); and (2) mental accounting – the implicit method individuals use to evaluate and code financial outcomes - Kahneman and Tversky (1984), Thaler (1985). Myopic loss aversion refers to loss aversion and short evaluation period.

To simulate long term decision making in the design of an experiment we use repeated gambles. Klos et al. (2005) points out that while everyone agrees that risk reduction is a desirable goal, not all definitions of risk are consistent with the observation that risk is reduced by repeated plays. Equating risk with the probability of a loss is only one possibility. Most people would agree that the magnitude of potential losses needs to be considered as well. They investigate the effect of time horizon on investment behavior, and report the results of an experiment in which business graduate students provided certainty equivalents and judged various dimensions of the outcome distribution of simple gambles that were played either once or repeatedly for 5 or 50 times. Despite correctly realizing that outcome standard deviation increases with the number of plays, respondents showed evidence of Samuelson's (1963) fallacy of large numbers. Perceived risk judgments showed only low correlations with standard deviation estimates, but were instead related to the anticipated probability of a loss (which was overestimated), mean excess loss, and the coefficient of variation.

# **DATA AND METHODOLOGY**

We conducted laboratory experiment at ESI of Chapman University on group of 58 subjects (students of the Chapman University). 33 males and 25 females were randomly chosen from the database. 10 to 14 subjects participated in each experimental session. One session lasted for approximately 50 minutes and the average earning for participant was approximately 20 USD (show up fee included). Each experimental session consisted of three parts. We designed an experiment with two different lotteries (representing two treatments: Unregulated and Regulated market). Each treatment consists of three rounds of three consecutive lotteries. Subjects were asked to place the wager for three of lotteries in one round. Wager was done from initial endowment of 200 cents within the interval of 0 to 200 for one round consisted of three lotteries (200 cents of initial endowment for each lottery). A remarkable series of laboratory

experiments has found that subjects are more willing to invest in risky assets with positive expected returns if only aggregated returns are reported to them, rather than the individual component returns. We informed subjects about monetary result for one lottery as a whole. In "Fair treatment" we defined lottery with 2/3 chance of losing the wager and 1/3 chance of chance of winning 2.5 times the wager. In second treatment ("Unfair lottery") we limited the possible loss in the case of negative outcome from the lottery to the half of the wager. The third part of experiment was risk elicitation. For risk elicitation we used standard Holt - Laury test (Holt - Laury, 2002). After fulfilling all three parts of experiment, subjects were asked to fill the questionnaire.

### RESULTS

For the evaluation and statistical analysis of results we used the SPSS program. 33 male and 25 female subjects participated in the experiment. According to previous reported large scale analysis results males are significantly more risk positive than females. In our sample males were biding higher wagers, with the exception of wager number three, but the difference is not statistically significant (see the Independent sample test in Appendix 1) as equal variances were not assumed.

	Gender	N	Mean	Std. deviation	Std. error mean
wager1	Male	33	121.55	59.553	10.367
0	Female	25	104.04	45.572	9.114
wager2	Male	33	124.67	56.783	9.885
0	Female	25	112.68	45.249	9.050
wager3	Male	33	126.67	63.153	10.994
8	Female	25	127.80	42.058	8.412
	Gender	Ν	Mean	Std. deviation	Std. error mean
wagerII1	Male	33	147.42	57.539	10.016
8	Female	25	108.84	38.685	7.737
wagerII2	Male	33	145.939	59.8519	10.4189
0	Female	25	110.000	42.2325	8.4465
wagerII3	Male	33	142.03	65.150	11.341
0	Female	25	119.12	48.356	9.671

Table 1: General statistics for wagers according to gender

\* Wager is referring to the "Fair lottery". WagerII is referring to the "Unfair lottery". In this table we present general statistics for wagers in three "Fair lotteries" and in three "Unfair lotteries".

In regulated setting (Unfair lottery) losses were limited to the half of the wager in the case of negative outcome from three lotteries in one round. The amount of wager increased significantly in this treatment among male subjects. It rose from 121.55 cents for the first wager in "Fair lottery" to 147.42 cents for the first wager in "Unfair lottery". In contrary, females had consistent amount of wagers for both treatment, in "Unfair lottery" they reported slightly lower wagers.

Table 2:	Wagers a	according to	the order	of treatments

		Ν	Mean	Std. Deviation	Std. Error Mean
wager1	Fair First	32	118.94	58.670	10.372
0	Unfair First	26	107.92	48.680	9.547
wager2	Fair First	32	131.09	56.162	9.928
0	Unfair First	26	105.23	43.352	8.502
wager3	Fair First	32	131.03	61.600	10.889
0	Unfair First	26	122.38	45.341	8.892
wagerII1	Fair First	32	150.41	56.719	10.027
-	Unfair First	26	106.65	37.867	7.426
wagerII2	Fair First	32	155.438	51.9410	9.1820
0	Unfair First	26	99.692	43.6346	8.5575
wagerII3	Fair First	32	152.63	59.786	10.569
8	Unfair First	26	106.96	48.452	9.502

\* We refer to "Fair lottery" in the case, that there is no limit on losses and gains from lottery, this setting represents unregulated market environment. We refer to "Unfair lottery" if loss in the case of negative outcome is limited to half of the wager. This table shows mean wagers for all subjects according to the order of treatment. Wagers in situation when subjects were facing fair market conditions followed with regulated market are significantly higher, except for the first wager. We can also observe significant increase in amount of wagers in situation with limited losses. In "Fair lottery" there is no statistically significant difference in the amount of wagers depending on the order of lotteries. We can observe statistically significant difference in wagers in lottery with limited losses. In this treatment, wagers tent to be higher if subjects start an experiment with "Fair lottery". We investigated if the different order of treatments caused different wagers between male and female subjects. T test statistics for both groups approved that the order of treatments affects more female than male subjects. Female starting with Unfair lottery tent to bid lower in Unfair lottery than in Fair lottery treatment. This results support some previous findings that females are more likely misjudging the level of risk.

To support our outcome we run statistical analysis for averages of wagers in "Fair" and in "Unfair lottery" for every subject. Results are reporting increase in average amount of wager in "Fair lottery" in comparison to "Unfair lottery" within male subjects from 124 to 145 units. Within female subjects the average wager was higher in Fair lottery (but the difference was not statistically significant). Male subjects had higher bids in "Unfair lottery" than in "Fair lottery" and it is statistically significant on the 90% level of confidence. Female subjects were bidding equally low in both treatments. Supporting statistical evidence is presented in Appendix 2.

 Table 3: Paired Samples Test for Order of Treatments and Gender

Gender	Order of Treatment	Average Fair Wager	Average Unfair Wager		Paired Di	fferences		t	df	Sig. (2- tailed)
		122 9050	124 (290	Std. Deviation	Std. Error Mean	95% Confider Lower	Upper	2 (07	10	014
Male	Fair First Unfair First Fair First	123,8056 117,1282 128,9500	134,6389 116,5128 163,7333	57,68459 53,71700 30,93215	12,89867 14,89841 8,92934	-61,78055 -31,84547 -30,48668	-7,78611 33,07624 8,82002	-2,697 ,041 -1.213	19 12 11	,014 ,968 ,250
Female	Unfair First	106,5641	92,3590	18,40065	5,10342	3,08572	25,32453	2,783	12	,017

This table shows that females were more affected by the order of treatments when deciding about wager more than males.

We analyzed the impact of the order of lotteries on the amount of wager. Subjects who participated in "Unfair lottery" as the first treatment bid lower average wagers in "Fair lottery", but this observation is not statistically significant on the 95% level of confidence. We can confirm that with 95% level of confidence that subject tent to bit lower wagers if they start with "Unfair lottery".

To measure the risk attitudes of subjects we used Holt - Laury test on risk elicitation. Within our sample of 58 subjects 44 subjects clearly expressed their risk attitudes and we could divide them into groups of sensitivity (slightly risk loving, risk neutral, slightly risk averse, risk averse, very risk averse and extremely risk averse). We grouped outcomes and created three groups of subjects according to their risk attitudes (Risk loving, Risk neutral and Risk Averse). I contradiction to our expectations, risk loving subjects were biding the lowest wagers in both order of treatments.



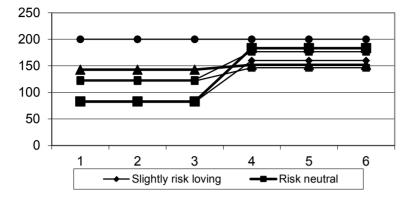


Figure 2: Average wagers in Unfair First Treatment

## CONCLUSIONS

Financial market regulation is imposed by governments on markets to preserve individual investors from wrong decisions. We were focused on long-term decisions, using multiple gambles to simulate this environment. Consistent with previous research studies we expected that male subjects would bid higher wagers then female subjects, that both groups, males and females, would increase their wagers in regulated market ("Unfair lottery").

In conducted experiment subjects were exposed to two different environments. In Fair lottery they could win 2.5 times their wager with the probability of 33.33 % and loose the wager with probability of 66.66 %. This setting was representing unregulated market. In Unfair lottery losses from lottery were limited to the half of wager. This setting represents regulated market. The results of our investigation showed that male subjects were biding higher wagers than female subjects in both treatments. This outcome is consistent with large scale surveys. Within male population we found support for our second expectation as well. Average wagers of males were higher in regulated lottery. Average wagers of females were lower comparing the ones of males.

Surprisingly, female subjects bid lower wagers in regulated lottery setting but not on reasonable level of statistical significance, which means that they did not change their behavior. In comparison the male subjects were able to better assess the change in risk and were learning to higher wagers in unfair lottery. We can explain this using observation from large scale surveys, which state that females are less sensitive to the change in conditions and level of risk. This conclusion remark needs to be investigated in further research.

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# **APPENDICES**

	Levene's Test for Equality of Variances					t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-	Mean	Std. Error	95% Confidence Interval		
		1	515.	t	tailed) Difference		Difference	Lower	Upper		
Wagarl	EVA	6.641	0.013	1.222	56	0.227	17.505	14.32	-11.18	46.191	
Wager1	EVN			1.268	55.987	0.21	17.505	13.804	-10.147	45.158	
W2	EVA	3.743	0.058	0.867	56	0.39	11.987	13.828	-15.715	39.688	
Wager2	EVN			0.894	55.829	0.375	11.987	13.402	-14.862	38.835	
W2	EVA	5.488	0.023	-0.078	56	0.938	-1.133	14.612	-30.405	28.139	
Wager3	EVN			-0.082	55.207	0.935	-1.133	13.843	-28.872	26.605	
We III	EVA	8.25	0.006	2.891	56	0.005	38.584	13.345	11.851	65.318	
WagerII1	EVN			3.049	55.32	0.004	38.584	12.657	13.223	63.945	
W	EVA	8.989	0.004	2.556	56	0.013	35.9394	14.0588	7.7763	64.1025	
WagerII2	EVN			2.68	55.767	0.01	35.9394	13.4125	9.0684	62.8104	

Appendix 1: Independent sample test for variable wager.

EVA - Equal variances assumed, EVN - Equal variances not assumed

# Appendix 2: T-test of Paired Samples Means of Wagers in Treatments Considering Gender

			Pa	ired Differences			t	df	Sig. (2- tailed)
					90% Confidence the Diffe				
Male	Average Fair Wager Average Unfair	Mean -20.83838	Std. Deviation 58.01982	Std. Error Mean 10.09995	Lower -37.94658	Upper -3.73019	-2.063	32	.047
Female	Wager Average Fair Wager Average Unfair Wager	2.18667	27.76373	5.55275	-7.31343	11.68676	.394	24	.697

Paired Samples Statistics

		Mean	Ν	Std. Deviation	Std. Error Mean
Male	Average Fair Wager	124.2929	33	53.56899	9.32517
	Average Unfair Wager	145.1313	33	55.04568	9.58222
Female	Average Fair Wager	114.8400	25	34.12153	6.82431
	Average Unfair Wager	112.6533	25	37.80977	7.56195

		Levene's T Equalit Variar	ty of			t-t	est for Equalit	y of Means		
		F	<u>0:</u>	4	Df	Sig. (2-	Mean	Std. Error	95% Confider	
Average	EVA	F 7.890	Sig. .007	-1.253	Dr 56	tailed) .215	Difference -15.17468	Difference 12.10649	Lower -39.42690	Upper 9.07754
Fair Wager	EVN			-1.304	54.249	.198	-15.17468	11.63415	-38.49729	8.14793
Average Unfair	EVA	2.736	.104	-4.085	56	.000	-48.38702	11.84402	-72.11345	-24.66059
Wager	EVN			-4.203	55.774	a	-48.38702	11.51319	-71.45278	-25.32126
				Of Games	Ν	Me		l. Deviation	Std. Error	
Average Fai	r Wager		Unfair I	rirst		26 11	1.8462	35.45128		6.95257
			Fair Fir	st		32 12	7.0208	52.76824		9.32819
Average Uni	fair Wager		Unfair I	First		26 10	4.4359	37.80944		7.41504

## Appendix 3: Relevance of order of treatment

Appendix 4: General statistics for risk elicitation

Fair First

Number of subjects	58	
Number of subjects expressed their attitudes	44	
Order of Games	Fair Lottery – Unfair Lottery	Unfair lottery – Fair Lottery
Number of observations	25	19
Risk loving (4)		
Áverage wager	106.33	102.67
Median	110	97.50
Risk neutral (15)		
Average wager	117.07	151.04
Median	100	150
Risk averse (25)		
Average wager	124.13	139.04
Average median	100	150

32

152.8229

# BIOGRAPHY

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8.80743

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# FACTORS INFLUENCING THE DURATION TAKEN BY SMALL AND MEDIUM ENTERPRISES TO ACHIEVE THE BREAK-EVEN POINT IN THEIR OPERATIONS: EVIDENCE FROM URBAN SLUM SETTLEMENTS OF NAIROBI, KENYA

Charles M. Rambo, University of Nairobi, Kenya

## ABSTRACT

The past two decades have seen an exponential growth in the number of small and medium enterprises in Sub-Sahara Africa; however, about two-thirds of such enterprises often fail to take off, resulting to negative economic impacts at the micro and macro-levels. However, documentation of the subject remains limited, especially in Kenya. This study involved 146 enterprises that had been operational for between 1 and 5 years. Inclusion criteria included availability of consistent financial records as well as willingness to share such information. The findings showed that the duration taken to break-even ranged between 3 and 40 months. The level of training in financial management was the most important covariate, explaining up to 12.1% of variation in the duration taken to break-even. Ever training in financial management accounted for 10.2%, marketing (9.7%); educational attainment (8.6%), capitation-funding level (7.5%) and firm size (6.8%). The study recommends the need for universal entrepreneurship training programs, integration of entrepreneurship training in national plans, a multisectoral approach to entrepreneurship training, linkages between the private sector, academia and development partners as well as support centres at the county level to facilitate the development of such enterprises.

**JEL:** O16

KEYWORDS: Small and Medium Enterprises, Break-Even Analysis, Break-Even Point, Urban Slums

## **INTRODUCTION**

Break-even analysis is one of the key tools available for planning and managing a firm's financial performance, particularly during the initial years of operation. As noted by LeFever (1998), break-even analysis is a useful tool for planning the success of young business ventures as well as new products and services. It facilitates budgeting and long-range planning of cash inflows and outflows. Break-even analysis is logically appealing and readily applicable to business firms of all sizes. Once constructed, break-even charts provide the management with a convenient guide for judging operational performance, adjusting pricing levels or controlling cost components (Deakins, Logan & Steel, 2001; Rothberg, 2012).

The break-even point is achievable when the total costs of production or services equals the total revenue received from sales. It is a point where a business neither makes profits nor incurs losses (Ndaliman & Bala, 2007; Rothberg, 2012). For new business ventures or new products launched in the market, achieving the break-even point (BEP) is a great milestone towards success. The duration taken to achieve the BEP is an indication of the management's capacity to plan and manage the inflow and outflow of financial resources. It also reflects a firm's success in marketing its products or services, as well as supportiveness of the business environment (Rothberg, 2012).

The duration taken by SMEs to achieve the BEP is critical for Sub-Sahara African (SSA) economies; however, there is a dearth of relevant empirical literature to inform the planning, policy formulation and

financing of SMEs, particularly in Kenya. Although many SMEs are emerging, poverty levels remain all time high in most parts of the country, which raises concern about the preparedness of entrepreneurs with relevant financial management skills, the capacity to plan and manage cash inflows and outflows to expedite financial stability (Wanjohi, 2008; Mbithi & Mainga, 2006; Atieno, 2009).

The issues also raise concern on whether the business environment is supportive to the growth of SMEs or otherwise (Mbithi & Mainga, 2006). The duration taken by SMEs to achieve the BEP has significant micro- and macro-economic implications; thus, necessitating empirical investigations. The main objective of this study was to determine factors influencing the duration taken by SMEs in Nairobi's slum settlements to achieve break-even in their operations. The focus on Nairobi's slums stems from the high population growth rate, resulting from rural-urban migration. SMEs remain the largest provider of employment opportunities for rural-urban migrants; thus, their financial stability and growth becomes of paramount interest to management scholars and development agencies. The information generated by the study is also useful to financial institutions providing credit to SMEs, particularly because the financial success of SMEs translates to their own success, while SME failure increases the incidence of bad debts and court cases, with far-reaching negative effects at the micro and macro-economic levels.

# DATA AND METHODOLOGY

The study targeted small and medium enterprises (SMEs) that had been operational for between 1 and 5 years. Inclusion in the sample depended on the availability of consistent financial records detailing monthly sales and expenditures, as well as willingness to share such information and to participate in the interview. Out of 266 SMEs contacted, 146 (54.9%) met inclusion criteria and their managers participated in interviews in early 2012. Data collection included identification of SMEs meeting the inclusion criteria, consenting, interviews and extraction of information from financial records. We applied a cross-sectional survey design, with quantitative and qualitative approaches to guide the research process. Detailed description of the design and approaches used in this study are available in following publications (Nachmias & Nachmias, 1996; Bryman & Cramer 1997; American Statistical Association, 1999; Owens, 2002; Rindfleisch, Malter, Ganesan & Moorman, 2008). Quantitative analysis generated cross-tabulations with Chi-square ( $\chi^2$ ) tests, correlation co-efficients, scattergram with F-statistic and *odds ratios* [*Exp*( $\beta$ )]. In addition, we processed and analyzed qualitative data using thematic analysis, which involved transcription of responses, creating thematic nodes and systematic interpretation.

## **RESULTS AND DISCUSSIONS**

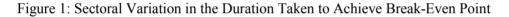
Of the 146 small and medium enterprises (SMEs), 19% dealt in woodwork products, 21% traded in metalwork products, 13% sold clothing products, while another 12% specialized in bakery products. Other business forms involved in the study included beadwork (10%), automobile (9%), chemists (6%), drycleaners (6%) and supermarkets (4%). Up to 82.2% of SMEs dealing in wooden products operated as retailers. For metalwork traders, 58.4% served the market as both retailers and wholesalers, while 54.6% of SMEs dealing in clothing products operated as both retailers and wholesalers. In the case of bakery products, nearly two-thirds (58.1%) were involved in retailing, while 79.3% of SMEs specializing in beaded products also operated as retailers. Table 1 shows the mean duration taken by business ventures in each category to break-even. The results show that supermarkets took the longest time (24.5 months) to achieve BEP, followed by drugstores (23.1 months), automobile services (22.1 months) and beadwork (17.5 months). Contrastingly, businesses specializing in bakery products recorded the shortest mean duration (13.1 months) to break even, with the fastest firms taking 3 months. Next in line from the top were SMEs specializing in metalwork products (13.7 months) and woodwork products (14.8 months).

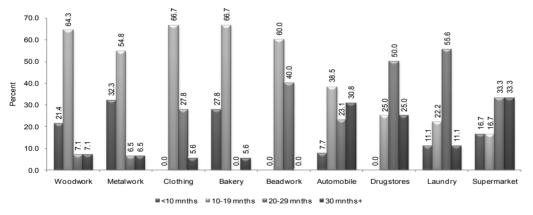
Sub-sector	Ν	Mean	Std. Deviation	Minimum	Maximum
Woodwork	28	14.79	7.35	3	34
Metalwork	31	13.74	7.57	4	39
Clothing	18	16.72	7.00	10	36
Bakery	18	13.11	6.76	3	33
Beadwork	15	17.47	6.40	11	27
Automobile	13	22.08	9.09	8	35
Drugstores	8	23.12	7.55	11	33
Drycleaners	9	20.89	9.06	4	34
Supermarkets	6	24.50	10.91	9	40
Overall	146	16.75	8.24	3	40

Table 1: Mean Duration Taken to achieve the Break-Even Point (months)

The table shows the mean duration taken by firms in various sub-sectors to achieve the break-even point. The first column shows the sub-sectors captured by the study, the second column shows the number of firms in each sub-sector, the third column is the standard deviation from the mean in each group, while the fourth and fifth columns show the minimum and maximum duration (in months) taken by firms in each sub-sector to break-even.

Firms dealing in wooden and bakery products reported the shortest time taken to achieve BEP, supermarkets showed the longest duration. Overall, SMEs included in the study took an average of 16.8 months to break-even. Figure 1 shows that up to 21.4% of the SMEs in the woodwork achieved the break-even level within the first 10 months of their operations.



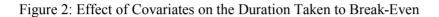


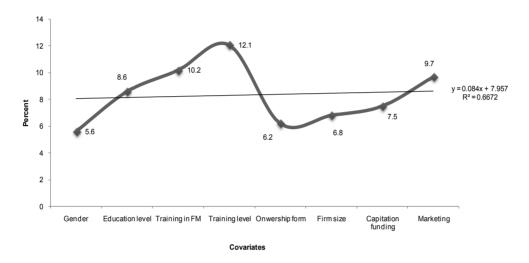
The figure shows the average duration taken by small and medium enterprises in each sub-sector to achieve the break-even point. The duration has been grouped into four categories, including 'less than 10 months', which is represented by the first bar from left; '10 to 19 months', represented by the second bar; '20 to 29 months' represented by the third bar and '30 months or higher'. Within the text, I designate the categories as first, second, third and fourth terms, respectively. Besides, I refer to firms reaching BEP within the first 10 months as early bloomers and those doing so at 30 months or higher as late bloomers.

Among SMEs dealing in metalwork products, about one-third (32.3%) reached the break-even point within 10 months. The proportion of firms achieving BEP within the first term was high among traders in the metalwork, woodwork and bakery sub-sectors, while the proportion of late bloomers was high among drycleaners, drugstores, beadwork dealers and supermarkets. The analysis obtained a computed  $\chi^2$  value of 56.381, with 24 degrees of freedom and a  $\rho$ -value of 0.000. The result is significant at 0.01 error margin, implying up to 99% chance that the duration taken to achieve BEP was significantly different across the various sectors. The duration taken by SMEs to break-even is a function of various factors both within and outside business firms. Internal factors include attributes of SME managers and attributes specific to SMEs. Besides, external factors arise from the environment in which a firm operates and may include market demand and supply forces, competition, cartels and distribution channels as well as government policy. Factors captured by this study included gender of SME managers, education level,

professional training in financial management, ownership form, amount of capital invested, firm size in terms of number of paid workers and business age.

The study found that the duration taken by firms to achieve BEP significantly associated with gender, educational attainment, ever training in financial management, level of training in financial management and ownership type. In addition, the duration taken by SMEs to break even significantly correlated to the number of paid workers, the level of capitation funding as well as the advertisement of merchandise, while external factors included competition, high poverty levels, high cost of electricity and high transportation cost. Based on the proportion of variance in the duration taken to break-even, we plotted the resultant proportions on a scattergram as indicated in figure 2.





This figure shows the distribution of covariates on a scatter-gram, which was also used to generate best-fit line and co-efficient of determination  $R^2$ , representing the predictive power of the model. The linear equation for the model is y=0.049x + 4.181, with  $R^2=0.6672$ . Overall, the model explains up to 66.7% of variance in the duration taken by small and medium enterprises to break even in their operations.

The results in figure 7 show that training level accounted for up to 12.1% of variation in the duration taken by SMEs to attain BEP. In other words, supporting SME managers to attain the highest level of training in financial management is likely to reduce the time taken to break-even by up to 12.1%. Training in financial management explained up to 10.2% of variation in the duration taken to achieve BEP. Next in order are marketing initiative (9.7%), education level (8.6%), the level of capitation funding (7.5%), firm size (6.8%), ownership form (6.2%) and gender of SME managers (5.6%). Overall, the model explains 66.7% of variance in the duration taken by SMEs to attain BEP.

# CONCLUSIONS

Government of Kenya (GoK) has formulated various policy frameworks to spur the growth of SMEs, however, there is lack of programs designed to improve the management capacity of entrepreneurs, which in turn, undermines the survival of SMEs. As a result, about two-thirds of SMEs often fail to realize their potential and purposes for which they are established. SME failure negatively affects the economy at the household and national levels. The study found that the duration taken by SMEs to break-even varies significantly from one sector to the other. While some firms reached the BEP within a few months of operation, the study showed that others took as long as 40 months before breaking-even. Furthermore, training in financial management was the most important covariate explaining up to 12.1% of variation in the duration taken by SMEs to attain the BEP. This is followed by ever training in financial management,

which accounted for 10.2% of variation in the duration taken to break-even, ever marketing (9.7%), educational attainment (8.6%), the level of capitation funding (7.5%), firm size (6.8%), ownership form (6.2%) and gender of SME managers (5.6%). However, the central theme of factors influencing the duration taken by SMEs to achieve BEP is poor planning and management of financial resources vis-à-vis the external environment.

With appropriate skills in financial management, SME managers are likely to reduce up to 10.2% of delays in breaking even. Better still, with training of up to higher diploma level, SME managers are likely to reduce up to 12.1% of delays in achieving financial stability. This implies that enhancing access to credit facilities, easing taxation and providing infrastructural facilities alone is incomplete it such measures are not accompanied with training programs to enable potential entrepreneurs acquire and develop skills in financial management. In view of this, SSA governments should consider investing in entrepreneurial training programs to support the growth of SMEs. Already countries such as Rwanda and Mozambique have made efforts to target entrepreneurship education to women and rural populations, as part of their poverty reduction strategy. The experiences of these two countries can provide useful lessons to inform entrepreneurship education in other SSA countries.

Training in financial management and the level of such training are the most crucial covariates explaining the duration taken by SMEs to achieve the BEP in their operations. The Government of Kenya continues to support the development of SMEs by improving access to funding through programs such as the Youth and Women's Enterprise Funds. The government also strives to create an enabling business environment by easing-off taxation and providing necessary infrastructural facilities. However, there is limited evidence of strong and well-funded training programs targeting potential entrepreneurs in all parts of the country. Consequently, measures such as enhancing access to funding and creating an enabling environment are less likely to reduce the proportion of SMEs sinking with capitation funding. Financial management skills are particularly important in resource-poor countries, particularly in SSA.

Initiating appropriate training programs for entrepreneurs is likely to shorten the duration taken to achieve the BEP by SMEs, which in turn, is likely to synergize the positive role of SMEs in economic development, rather than perpetuate poverty. Furthermore, efforts to support the growth of SMEs should have a long-term scope of investment, particularly through training programs, designed to help prospective entrepreneurs identify their abilities, analyze the environmental setup of small-scale business and industry, fulfill entrepreneurial ambition and acquire skills. Entrepreneurship education should not only help people incubate business ideas but also how to steer business ventures to great heights of financial stability. Entrepreneurship education should form part of the education system. The idea is to embed entrepreneurial culture in the education and training systems to prepare people for effective Besides, national development strategies and plans should incorporate management of SMEs. entrepreneurship education. Entrepreneurship education should not be a continuous process that is accessible to all entrepreneurs. An effective entrepreneurship education should involve all stakeholders in the private sector, education institutions and development partners. This necessitates linkages to facilitate the flow of skills, information and resources to support curriculum development and actual training activities at all levels. Such linkages are also necessary to open up opportunities for trainees to access opportunities to practices and develop their skills.

## ACKNOWLEDGEMENT

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# THE EFFECT OF CORRUPTION ON FDI INFLOW: EMPIRICAL EVIDENCE FROM ASIAN ECONOMIES

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## ABSTRACT

The effect of corruption on FDI inflow is still debatable among scholars in the field. On one hand, some studies provide support for the idea that corruption in the host country may hinder FDI inflow by increasing economic uncertainty, and thereby weakening investors' confidence in the market systems and on political institutions. On the other hand, some scholars argue that corruption can have a positive impact on investment by facilitating transactions in countries and reported a positive relationship between corruption and FDI. This study has made fresh insights and investigates the effects of corruption on FDI inflow for a panel of 16 Asian economies from 1995-2009, taking the possible endogeneity problems between corruption and FDI inflow into consideration. The empirical result suggests a one unit increase in the level of corruption triggers a decrease in FDI inflow by approximately 9.1 percentage points. Thus, some of the arguments that corruption does not keep FDI out of those corrupt countries were either flawed or invalid. In fact it is reasonable to claim that some of the countries that are characterized by high level of corruption but also with a remarkable FDI inflow could even double their inward FDI if they manage to reduce the present pervasive level of corruption.

**KEY WORDS:** Corruption; FDI Inflow; Panel Data; REM, FGLS; Economic Growth; Openness; Human Capital

# INTRODUCTION

Until recently, there was a strong consensus in the literature that multinational corporations (MNCs) invest in specific locations mainly because of strong economic fundamentals in the host countries for example, large market size, stable macroeconomic environment, availability of skilled labor, infrastructure etc and thereby influence the attractiveness of the country to FDI inflows (Dunning, 1993; Shapiro and Globerman, 2001). However, the host country's economic fundamentals may not be sufficient for inward FDI. Therefore it now becomes important to study afresh what determines inflow of FDI. In this regard, one of the most damaging risks that MNCs must consider in entering emerging market economies is the threat of corruption. Corruption raises the cost of doing business, distorts the allocation of resources and the price of goods and services for consumers, and discourages foreign direct investment (Zhao, Kim, and Du, 2003). According to Myint (2000), corruption is defined as the use of public office for private gain. Following from this definition, examples of corrupt behavior would include: (a) bribery, (b) extortion, (c) fraud, (d) embezzlement, (e) nepotism, (f) cronyism, (g) appropriation of public assets and property for private use, and (h) influence peddling. Corruption exists throughout the world, in developed and developing countries alike. Nevertheless, corruption is worse in countries where institutions, such as the legislature, the judiciary, and the rule of law are weak (Lawal, 2007). Likewise, corruption acts as an irregular tax on business, increasing costs, and distorting incentives to invest (Shleifer and Vishny, 1993; Mauro, 1995; Wei, 2000a).

Accordingly, corruption is a frequent occurrence for international investors. A World Bank study (1999) revealed that more than 85 percent of polled multinational companies "always" or "mostly" encounter corruption while dealing with public sectors. According to Quah (1982), the consequences of corruption can be minimized if government has an effective anticorruption strategy and implements it impartially. In doing so, Quah (1982) develops a matrix of anticorruption strategies can be used to analyze the anticorruption efforts of several Asian countries as shown in table 1 below.

#### Table 1: A Matrix of Anticorruption Strategies

			ruption Measures
Commitment of political leadership	Strong Weak	Adequate Effective strategy Ineffective strategy I	Inadequate Ineffective strategy II "Hopeless" strategy
Source: Quah (1982)		65	1 05

Table 1 shows four strategies for combating corruption, depending on the adequacy of the anticorruption measures employed and the strength of political leaders' commitment. The effectiveness of anti-corruption measures depends on two factors: (1) the adequacy of the measures in terms of the comprehensiveness of their scope and powers; and (2) the level of commitment of political leaders to the goal of minimizing corruption. In other words, for anticorruption measures to be effective, they must be properly designed (to attack the causes of corruption), and they must be sponsored and upheld sincerely by political leaders. Apparently, it was only Singapore and Hong Kong are the two least corrupt Asian city states that institutionalized both strong commitment of political leadership and adequate anticorruption measures, and ultimately managed to greatly minimize, if not eliminated, corruption. The remaining countries either don not strong commitment of political leadership or adequate anticorruption measures.

## The Nexus Of Corruption And Fdi Inflow: Theory, Empirics And Conflicting Views

The "*Grabbing-Hand*" theory of corruption, supported by economists such as Shleifer and Vishny (1993), Bliss and Di Telia (1997) and Aidt (2003), claimed that corruption in an economy is like a grabbing hand that increases the costs of carrying out economic activities in the market. According to this theory, corruption raises the cost of doing business (irregular tax), distorts the allocation of resources and decreases the output-generating capacity of investment (Zhao, Kim, and Du, 2003). Thus, corruption is a double edged sword: it reduces both the volume & efficiency of investment (Sarkar and Hasan, 2001). On the other hand, the "*Helping-Hand*" theory of corruption, supported by economists such as Lui (1985), Beck and Maher (1986) and Saha (2001), claimed that rather than obstacle for business, corruption could be an efficient "lubrication" for rigid economic regulation and red-tape. Similarly, Huntington (1968) and Leff (1989) argue that corruption can have a positive impact on investment by facilitating transactions in countries with excessive regulations. Furthermore, some countries with high level of corruption, such as China, India, or Nigeria, are the recipients of a great deal of FDI. Corruption doesn't keep FDI out of very corrupt countries.

The third view is that although countries like India, China and Nigeria are performing very well in attracting FDI despite their high record of corruption doesn't conceal the reality that those countries would have even doubled their FDI inflow if corruption level had been low. According to Vittal (2001), if China manages to reduce red tape and corruption and enhance better rule of law and property protection, it can even double its FDI. Likewise, if corruption in India declines to those of Scandinavian countries, GDP and FDI would increase by 1.5% and 12%, respectively. The fourth view is that the level of corruption in the host economy may affect FDI inflow, or *vice versa* or both (Pinto and Zhu, 2008). Thus, it is important to conduct further research to understand in detail just how corruption affects FDI.

#### Other Important Factors Influeincing Fdi Inflow

In addition to our variable of interest, i.e. level of corruption, the following important factors are also influencing FDI inflow and treated as control variables.

(i) *GDP Growth*: a government that has generated impressive economic growth in the past is

likely to attract more foreign investors to its country.

- (ii) *Human capital* captures both education and health. Thus, both education and health (life expectancy) variables are assumed to be positively affecting FDI inflow.
- (iii) *Income per capita:*-income per capita which is captured by GDP/capita (PPP) measures the level of development of that country and also tells us the purchasing power of the people of the host economy. It is therefore expected to have a positive relationship with FDI inflow.
- (iv) *Infrastructure*:-infrastructure is expected to directly contribute to FDI inflow.
- (v) *Domestic Interest rate:*-the effect of interest rate on FDI inflow is ambiguous.
- (vi) *Openness:* The degree of openness of a host economy is assumed to be one of the necessary stimulants to attract FDI.

## Main Objectives Of The Study

The main objective of this study is to verify the extent to which corruption will have an effect on FDI under the context of Asian economies. As a result, this study will contribute to create greater awareness and fresh insights into the problem and to suggest concrete ideas and approaches on possible measures to combat it.

## The Data And Stylized Facts

This study deals with a panel of 16 Asian economies from 1995 to 2009. The year 1995 was chosen as our starting point because it is a year for which we have full, annual data coverage on the "freedom from corruption (FFC)" index which is derived from the annual reports of the *Index of Economic Freedom* which has been published by the *Heritage Foundation*, in partnership with the *Wall Street Journal*. The FFC index is measured on a scale from 0 to 100, where 100 represent the highest level of freedom from corruption/or the lowest level of corruption. List of countries included in this study as shown in table 2 below. These countries are selected mainly because of the availability of data throughout the years.

Table 2: Countries included in the study

Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea Republic, Malaysia, Nepal, Pakistan, Philippines, Singapore, Thailand, Vietnam, and Sri Lanka

Moreover, the independent variables, which were discussed in the preceding section and their expected relationships with economic FDI inflow, are summarized in table 3 below.

Table 3: Independent variables, their expected signs and data sources

Variable	+/-	Data Sources
Freedom from Corruption (FFC)	+	Heritage Foundation
Economic Growth	+	WDI database
Education	+	WDI database
Health	+	WDI database
GDP per capita (PPP)		WDI database
Infrastructure	+	WDI database
Interest rate	+	WDI database
Openness	+	WDI database

Corruption And Fdi Inflow In Asian Economies: Descriptive Statistics

China is the major FDI destination economy in Asia which receives an average FDI inflow of \$60.6 billion every year (Table 1). Meanwhile, Hong Kong, Singapore, and India followed China at a distance with an FDI inflow performance of \$30.1 billion, \$15.85 billion, and \$11.1 billion, respectively. Major

economies in Asia such as Japan and Korea republic have managed to attract only \$ 7.5 billion and \$ 5.3 billion FDI inflow, respectively. At the opposite extreme, Nepal, Cambodia, and Bangladesh achieved the lowest FDI inflow in the region with a record of \$0.01 billion, \$0.32 billion, and \$0.53 billion, respectively. Ironically, countries such as Philippines and Pakistan with a high level of trained human capital and significant natural resources couldn't manage to attract significant amount of FDI.

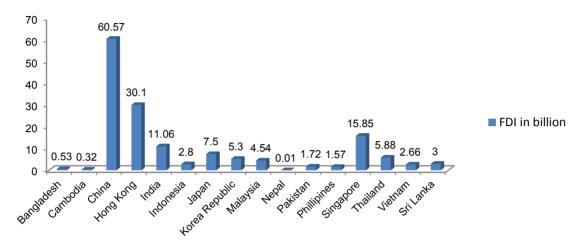
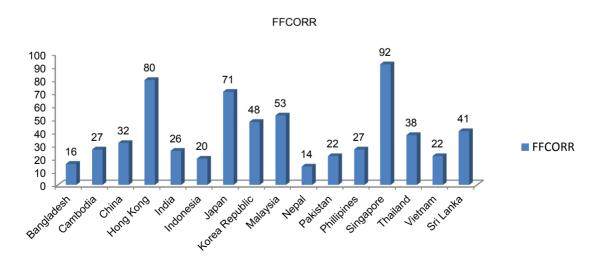


Figure 1: Average FDI Inflow into Asian Economies (1995-2009)

Figure 2 below indicates Singapore and Honk Kong are the top two countries which enhanced a better and relatively corruption-free economy's. The level of corruption in some of the economies such as Japan, Malaysia, and Korea are modest and they exactly achieved a modest level of FDI inflow as it has been displayed in figure 1. Of course, there are some exceptions like China and India with a high level of corruption but among the top FDI recipients in Asia. However, it can be argued that though China and India are performing very well in attracting remarkable FDI, they are still performing well belowpotential. Also, it has become more clear from figure 2 that those countries with a high level of corruption including Nepal, Bangladesh, Cambodia, Sri Lanka and the Philippines are also experiencing a very low level of FDI inflow.





#### The Correlation between FDI Inflow and the Independent Variables

Before we move to the regression analysis, it is worth to examine the correlations that exist between FDI Inflow and the independent variables. From table 4, it has become evident that the more the economy is free from corruption, the more the economy is able to attract inward FDI. Similarly, the correlation analysis reveals economic growth has been directly and significantly associated with FDI inflow, implying an impressive growth record in the past might have provided better confidence for foreign investors. The evidence also points out that there is a positive and significant correlation between FDI inflow and human capital. By the same token, income per capita and physical infrastructures are also positively and significantly correlated with FDI inflow at 5% level of significance. Other important control variables that were found to be directly and significantly correlated with FDI inflow include openness and interest rates.

Table 4: Partial Correlation of FDI Inflow with other Independent Variables

Variable	Correlation	Significance
Freedom from Corruption (FFC)	0.2045	0.052**
Economic Growth	0.2610	0.000***
Education (secondary school enrollment ratio)	0.1964	0.000***
Health (life expectancy)	0.182	0.039**
GDP/ capita (PPP)	0.150	0.023**
Infrastructure (telephone /100 people)	0.173	0.018**
Interest rate	0.102	0.018**
Openness	0.355	0.000***

## **RESEARCH METHODOLOGIES**

Given the panel structure of the data in this study, the model to investigate the effects of *corruption* on *FDI inflow* was constructed for a balanced panel data of 16 Asian economies from 1995 to 2009 as follows:

$$FDI_{it} = \beta_0 + \beta_1 FFC_{it} + \beta_j \sum Z_{it} + \alpha_i + \delta_t + \varepsilon_{it}$$
(1)

Where, index *i* refers to the unit of observation, *t* refers to the time period, FDI refers the ratio of FDI to GDP (FDI/GDP), FFC refers *freedom from corruption* index of the host economy, Z refers other control variables,  $\alpha_i$  refers individual specific unobserved factors,  $\delta_t$  refers time specific unobserved factors, and  $\varepsilon_{it}$  are individual and time specific residuals (a random shock term, which represents the possible shocks for the source-host combination at time t). Here it is worth mentioning that MNCs normally make their investment decisions at time t based on information about past corruption and other control factors. Therefore, it is reasonable to assume that the level of FDI inflow into a host economy (i) at a time (t) is a function of explanatory variables in the last period (i.e. t - 1). Here, lagging the explanatory variables have delayed effect on FDI performance, but also is essential to address the issue of potential endogeneity problems provide that future values of FDI inflow have no influence whatsoever on the control set, i.e., the future does not cause the present. Thus, the FDI inflow model takes the form:

$$FDI_{it} = \beta_0 + \beta_1 FFC_{it-1} + \beta_j Z_{it-1} + \alpha_i + \delta_{t-1} + \varepsilon_{it-1}$$
(2)

Since unobserved heterogeneity is the main problem of un-experimental research, panel data estimation techniques can allow us to control for individual unobserved heterogeneity. Furthermore, panel data give more informative data, more variability, less collinearity among variables, more degrees of freedom and more efficiency (Gujarati, 2003). Moreover, the Hausman (1978) specification test was conducted and

confirmed the suitability of random effect model (REM) instead of fixed effect model. Furthermore, a "Lagrange Multiplier (LM) test for Random Effects" was performed and the result has led to choose the REM against the pooled OLS model. Thus, the REM can be denoted as:

$$FDI_{it} = \beta_0 + \beta_1 FFC_{it-1} + \beta_j Z_{it-1} + \delta_{t-1} + u_{it-1}, \text{ where } u_{it-1} = \alpha_i + \varepsilon_{it-1}$$
(3)

In line with this, a White's general test for *heteroscedasticity* was conducted and the result rejected the null hypothesis of *homoscedasticity*. Similarly, Wooldridge's tests for autocorrelation in panel data were conducted and the null hypothesis that there is no first order autocorrelation was not rejected. Furthermore, panel data unit root test was conducted using Levin-Lin-Chu test for FDI and the result confirms the data is stationary. According to Wooldridge (2002), if heteroscedasticity is detected but serial correlation is not, then the usual heteroscedasticity-robust standard errors and test statistics can be used using the appropriate estimation techniques such as REM. In order to verify the consistency of the results from REM, this study also used other appropriate panel data analysis methods such as Feasible General Least Square Method (FGLS) and Regression with Panels Corrected Heteroskedastic Standard Errors (PCSE) for the reason that heteroskedastic models are usually fitted with FGLS. Accordingly, the main empirical results using the above mentioned panel estimation methods are shown in table 5.

## Regression Results And Main Findings

The empirical evidences from Table 5 reveal that freedom from corruption (FFC) is statistically significant using the three panel estimation methods. This implies that the more the country is free from corruption, the more the ability of the country to build confidence among foreign investors and to be a major destination for FDI inflow. For instance, the evidence from the REM implies that keeping other factors constant, a 1 percent decrease in the level of corruption may trigger inward FDI into the economy with an increase of 9.1 percentage points. By the same token, the empirical results derived from the FGLS and PCSE estimation methods verify that keeping other factors constant, a 1 percent improvement in the FFC index may increase FDI inflow by 11.4 and 14.4 percentage points, respectively. Thus, some of the arguments that corruption does not keep FDI out of those corrupt countries were either flawed or invalid. In fact, those countries that are characterized by high level of corruption but also with a remarkable FDI inflow could even double their inward FDI if they manage to reduce the present pervasive level of corruption.

Therefore, the main implication of these findings is that there is a crucial need for curbing the current level of deep-rooted corruption in many of Asian economies by enhancing good governance and better economic institutions including strengthening the effectiveness and predictability of the judiciary, enforceable contracts and the rule of law, drying up the root causes of corruption and rent seeking, and developing an environment where fair and predictable rules form the basis for social and economic interactions. The regression results using the three estimation methods also confirm sustainable economic growth in a country is one of the main positive attributing factors to promote inward FDI. In line with this, this study verified that the two components of *human capital*: education and health were both found to be positive and significant determinants of FDI inflow. The *income per capita* variable which captures the level of development of the host economy and the purchasing power of the people may also significantly influence FDI inflow into a host economy. By the same token, *infrastructures* and *degree of openness were* found to be directly and significantly influencing inward FDI in Asian economies. However, the evidence from REM and FGLS found no evidence for domestic interest rate to influence the rate of FDI inflow (table 5).

FDI Inflow	REM	FGLS	PCSE
Freedom from Corruption (FFC)	0.0906***	0.1142**	0.1441***
	(0.0315)	(0.0538)	(0.0392)
Economic Growth	0.11305***	0.1532**	0.1651***
	(0.0255)	(0.0244)	(.0299)
Education	0.0245*	.0101**	0.03840*
(secondary school enrollment ratio)	(0.0137)	(0.0041)	(0.0208)
Health (life expectancy)	0.0937***	0.1079**	0.1083***
	(0.0130)	(.0504)	(.0193)
GDP/capital (PPP)	0.0639**	0.0531***	0.0921***
	(0.0264)	(0.0138)	(0.0229)
Infrastructure	0.0403*	0.0358*	0.0549**
(telephone /100 people)	(0.0217)	(0.0190)	(0.0271)
Interest rate	0.0403	0.0295	0.0538**
	(0.0381)	(0.0239)	(0.0157)
Openness	0.0301***	0.0568***	0.0632***
_	(0.0615)	(0.0204)	(0.0172)
Constant	-5.3739	-6.0345	-8.5694
	(3.6533)	(3.1438)	(4.8625)
Number of Observations	240	240	240
Number of Groups	16	16	16
Observation per group	15	15	15
Wald chi 2 (8)	189.16	218.44	247.39
Prob > chi 2	0.0000	0.0000	0.0000

Table 5: The Effect of corruption and other control variables on FDI Inflow (Coefficient/ Corrected Standard Error)

## **CONCLUDING REMARKS**

The empirical evidence in this study generally confirms that corruption remains a significant problem for inward FDI in Asian economies. This is equivalent to say that if a country is able to decrease the level of corruption by 1 percent, it may trigger inward FDI into the economy with an increase of about 9.1 percentage points. Thus, some scholars' argument that corruption doesn't keep FDI out of those corrupt countries is either flawed or invalid. In fact it is reasonable to claim that some of the countries such as China and India that are characterized by high level of corruption but also with a remarkable FDI inflow could even double their inward FDI if they manage to reduce the present pervasive level of corruption in their respective countries. The level of corruption in Asian economies and its main causes vary from one country to the next. The main contributing factors for corruption in any country includes policies, programs and activities that are poorly conceived and managed, failing institutions, poverty, income disparities, and inadequate civil servants' remuneration, lack of accountability and lack of transparency. Ultimately, all parts of society must share the responsibility for containing corruption because all are willing or unwilling participants. Each corrupt transaction requires a "buyer" and a "seller." Thus, on one hand, governments need to introduce appropriate legislation to reduce corruption and provide whatever means are necessary to ensure that appropriate steps are taken to build systems of integrity and rule of law. Thus, Singapore and Hong Kong's experiences demonstrate that combating corruption depends on the adequacy of the anticorruption measures employed and the strength of political leaders' commitment. In line with introducing appropriate legislation to reduce corruption, educating and involving the public in building integrity is the key to preventing corruption. In addition to enhancing a free-corruption economy, the following key factors also influence FDI inflow into a host economy: good track record of economic growth, investment in human capital (education) and health, the purchasing power of the people, physical infrastructure, and more openness in the economy. The findings have wide implications especially for Asian economies that have a high potential of attracting enormous FDI into their economies due to their endowment in abundant skilled and semi-skilled workforce as well as their geographical proximity to major FDI origin countries

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# HERD BEHAVIOR IN SAUDI ARABIAN STOCK MARKET: EVIDENCE FROM BOTH LINEAR AND NON-LINEAR MODELS

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# ABSTRACT

Herding in financial markets is a behavioral tendency of the investors to suppress their own belief and information in favor of the market consensus in their trading activities. This may cause short-term trend in financial markets. Our study investigates this phenomenon in Saudi Arabian stock market, where domestic individual investors are very aggressive traders and dominate approximately 90% of stock trading. In the empirical market-wide herding literature, either a decreasing dispersion of stock returns, or an increasing dispersion at a decreasing rate, with respect to market return is interpreted as evidence of herding. We examine both the linear and the non-linear models of the relationship between dispersion of returns across stocks and the market return. Perhaps due to its inherent shortcomings, the linear methodology yields no evidence of herd behavior. In sharp contrast, however, the non-linear model of the relationship indicates to a widespread prevalence of herding tendency among the investors. The evidence of herding is found to be independent of different market conditions, although it tends to be higher when the market rises and becomes more turbulent. In further analysis, we model the dispersion of stock betas following Hwang and Salmon (2004) to separate out herding from possible common movements in stock returns induced by the correlated movements in fundamentals. We find consistent results indicating strong and persistent herding towards the market, which is robust to the effects of different market conditions and macroeconomic factors.

JEL: G11; G12; G14

KEYWORDS: Herd behavior, Saudi Stock Market, Tadawul, Return dispersion, Beta dispersion

## INTRODUCTION

According to the classical finance theory, asset prices are expected to reflect all the relevant information in an unbiased and instantaneous manner. It presupposes a trader's ability to form rational expectations by correctly assessing and interpreting all the available information. There there is no scope for human psychology to interfere with the function of the market. In contrast, since its emergence in the late 1980s, the behavioral finance literature has acknowledged the role of human psychology and attempted to rationalize many of the commonly observed asset pricing anomalies from the viewpoint of human psychology. Since herding is mainly associated with the group psychology, it provides an alternative explanation as to how investors form expectations and make investment choices from the behavioral finance perspective.Convergence of investor behavior in financial market is often viewed as the consequence of irrational decision making (Hirshleifer, 2001; Shiller, 2005). Scharfstein and Stein (1990) suggest that herding may arise when it is potentially reputation-damaging for agents to deviate from the consensus. Even when the behavior is considered rational from an individual's perspective, herding in financial market may be inefficient from a collective point of view unless it is driven by the same fundamental information (Bikhchandani and Sharma, 2001). Hence is the motivation for empirical research on herd behavior in financial markets. Empirical literature on herding, to a large extent, has aimed at detecting correlated behavior within a certain group of institutional market participants such as the fund managers (for example, Lakonishok, Shleifer and Vishny, 1992; Grinblatt, Titman and Wermers, 1995; Wermers, 1999; Nofsinger and Sias, 1999; Sias, 2004; Choi and Sias, 2009; Patterson and Sharma, 2010). In detecting herd behavior, such group-based studies focus on buying or selling of the same stock by a particular type of investors in the market over a particular period of time.

A second category of empirical literature attempts to detect herd behavior by examining how the observed risk-return relationship in the cross-section of stocks differs from the predicted relationship by the rational asset pricing models. Unlike the group-based studies, empirical studies on market-wide herding focus on the behavior of all investors towards the consensus market view. In their pioneering study of market-wide herding, Christie and Huang (1995) analyze the co-movements of returns in the cross-section of US stocks. They find that the cross-sectional return co-movements in their sample conform to the predictions of the rational pricing model and thus suggest no evidence of herding. By applying a similar but modified approach, Chang, Cheng and Khorana (2000) examine herd behavior in the US, Japan, Hong Kong, Taiwan and South Korea. While they do not find evidence supporting herd behavior in the US and Hong Kong, they report significant evidence for the Taiwanese and South Korean market. Following Chang et al. (2000) approach, Chiang and Zheng (2010) examine herd behavior in several markets across the continents and report a mixed finding for the well-developed and emerging markets. They find evidence of herding in developed stock markets except the US as well as in the Asian emerging markets.

Hwang and Salmon (2004) propose an alternative approach that explores the behavior of cross-sectional factor sensitivity (risk), rather than return, of stocks. In their study of the US and South Korean market, they find significant evidence of herding in both markets under both bear and bull market conditions. Following this recently developed approach, Andronikidi and Kallinterakis (2010) and Demirer, Kutan and Chen (2010) report significant evidence of herding in Israeli stock market and Taiwanese industry portfolios. We select Saudi Arabian stock market for the study of market-wide herd behavior. At least a couple of important reasons drive our choice. First, to the extent that the theoretical predictions as well as existing empirical and anecdotal evidence are concerned, the emerging markets are likely to represent a thriving herding environment. Investors in these markets are likely to herd mainly due to the presence of information asymmetry, and lack of quality information and financial analysts. Although the Saudi Arabian stock market is by far the largest and most actively traded market in the Arab world, it still remains under consideration for being included as one of the pre-emerging frontier stock markets by the MSCI due to the country's weak regulatory environment, low market liquidity, limited access for foreign investors, and lack of financial transparency. Local individual investors heavily dominate the stock trading. Their trading accounts for more than 92 percent of stock turnover (Arab Monetary Fund, 2011).

Even more interestingly, Saudis are very aggressive traders. Individual investor accounts have a very high level of churn (turnover/net investment) – 118x/year vis-à-vis the mutual funds' 30x/year (NCB Capital, 2008). Therefore, unlike many other emerging/frontier markets, Saudi market presents a natural ground to test the herd behavior of mainly local individual investors. It is often argued in the literature that individual investors are more prone to herding. However, in markets where both individuals and institutions account for a sizable proportion of trading, it may be difficult to attribute herding solely to the activities of the individual investors. Therefore, by focusing on the Saudi stock market, our study is expected to provide a relatively cleaner picture of individual investors' herd behavior.

Secondly, although Saudi stock market does not currently allow direct ownership by the non-resident foreign investors, the government is actively considering opening it up to the global investors by the end of 2012 (Saadi, 2012, March 21; Hankir, 2012, February 22). Before pouring their money into a newly opened-up market, it is important for the prospective foreign investors to understand the stock price behavior of the market. And an understanding of the behavior of stock price would necessarily require an understanding of the investment strategies of currently active investors (Lakonishok, et al. 1992). Our

study, therefore, may prove very timely especially for the future global investors interested in the Saudi stock market. Finally, almost all previous studies of market-wide herd behavior rely on a particular testing methodology, which often leads to contradictory findings.

For example, using their respective methodologies, Chang et al. (2000) and Hwang and Salmon (2004) report completely opposite findings of herd behavior in the US stock market. Similarly, using the Christie and Huang (1995) and Chang at al. (2000) methodologies, respectively, Demirer and Kutan (2006) and Tan, Chiang, Mason and Nelling (2008) come to a completely different conclusion with regard to herding in the Chinese stock market. In our analysis, we subject Saudi stock market data to all major testing methodologies in the current literature, which is, therefore, expected to produce a more robust finding on possible herd behavior in the market. Looking ahead, the rest of the paper is organized as follows: Section 2 provides a description of alternative methodologies and the dataset used in our study, Section 3 presents empirical results of the analysis, and Section 4 summarizes and concludes the paper.

## METHODOLOGY AND DATA

When investors herd, it leads to a distortion in the risk-return relationship as suggested by the rational asset pricing models such as the CAPM. Accordingly, in order to test the presence of market-wide herd behavior, there have been broadly two different types of methodologies in the literature: the methodologies based on return dispersion – cross-sectional standard (absolute) deviation of returns and the ones based on beta dispersion – cross-sectional standard deviation of factor sensitivities of individual stocks. We employ both types of methodologies in our analysis to test the presence of herd behavior.

## Return Dispersion Methodologies

Christie and Huang (1995) propose the first return dispersion based methodology using the crosssectional standard deviation (CSSD) of individual returns around the market portfolio return. According to them, if herding is present in the market, individual security returns will tend to cluster around the overall market return, causing return dispersion to decline. They also argue that market participants are likely to suppress their own beliefs and information most during the periods of extreme market movements. Accordingly, they suggest the following dummy variable regression specification to test whether return dispersions are significantly lower than average during periods of extreme market movements:

$$CSSD_t = \alpha + \beta_L D_t^L + \beta_U D_t^U + \varepsilon_t \tag{1}$$

Where  $CSSD_t = \sqrt{(1/N-1)\sum_{i=1}^N (R_{i,t} - R_{m,t})^2}$  is the cross-sectional standard deviation ( $CSSD_t$ ) of N individual security returns ( $R_{i,t}$ ) around equally weighted cross-sectional average of the N returns in the aggregate market portfolio ( $R_{m,t}$ ) at time t.  $D_t^U = 1$  if market return at time t is in the extreme upper tail of the distribution, and equal to 0 otherwise, and  $D_t^L = 1$  if market return at time t is in the extreme lower tail of the returns distribution, and equal to 0 otherwise. Since during the period of herding in the stock market investors behave similarly, significantly negative  $\beta_L$  and  $\beta_U$  coefficients give the indication of the presence of herding phenomenon. In conformity with the related literature, we define extreme market return as one that lies in the 1%, 5% and 10% lower or upper tail of the market return distribution.

The second return dispersion based methodology employed in this paper is based on Chang at al. (2000) that uses cross-sectional absolute deviation (CSAD) of individual stock returns as a measure of return dispersion. They contend that the presence of herding violates the linearly increasing relationship and

render it to be non-linearly increasing, or even decreasing in cases where market return surpasses a certain threshold value. Based on this intuition and using  $CSAD_t = (1/N)\sum_{i=1}^{N} |R_{i,t} - R_{m,t}|$  as the proxy of  $CSAD_t$ , respectively, they suggest the following non-linear specification to detect herd behavior in the market:

$$CSAD_{t} = \gamma_{0} + \gamma_{1} \left| R_{m,t} \right| + \gamma_{2} R_{m,t}^{2} + \varepsilon_{t}$$
<sup>(2)</sup>

Where  $R_{m,t}$  is the market return at time t. A significantly negative  $\gamma_2$  coefficient would indicate the presence of herding.

We employ a second type of methodology as suggested by Hwang and Salmon (2004) that distinguishes between fundamental and non-fundamental co-movements across asset returns by construction. Rather than examining the return dispersion, Hwang and Salmon (2004) explores the time variation in the dispersion of the fundamental factor sensitivity or beta across assets in the market portfolio. They attribute the time variation in observed CAPM beta to behavioral anomalies such as herding. They suggest that, in the event of market-wide herding, the cross-sectional dispersion of stocks' beta would be expected to be smaller as the values of individual asset betas would tend towards the value of the market beta, i.e., unity. In original Hwang and Salmon (2004) framework, it is the market-wide herd behavior that drives the changes in  $Std_c(\beta_{imt}^b)$ , the standard deviation of cross-sectional betas of all the firms in the market. Therefore, it is important that we check if there are other potentially fundamental variables influencing  $Std_c(\beta_{imt}^b)$  that may turn herding inconsequential for the dynamics of  $Std_c(\beta_{imt}^b)$ .

In addition to domestic stock market related variables, we also consider the influence of three other macro variables that are potentially critical for the Saudi economy in general and Saudi stock market in particular, *viz.*, the change in crude oil price, 90-day US T-bill rate and the S&P 500 index return. Therefore, we estimate the regression of the following form:

$$\log[Std_{c}(\beta_{imt}^{b})] = \mu_{m} + H_{mt} + c_{m1}\log\sigma_{mt} + c_{m2}r_{mt} + c_{m3}OIL_{mt} + c_{m4}INT_{mt} + c_{m5}r_{mt}^{US} + v_{mt}(3)$$

where  $\log[Std_c(\beta_{imt}^b)]$ ,  $H_{mt}$ ,  $OIL_{mt}$ ,  $INT_{mt}$  and  $r_{mt}^{US}$  are the logarithm of cross-sectional standard deviation of estimated betas in month *t*, latent measure of herding, change in WTI oil price, 90-day US T-bill rate and S&P 500 returns, respectively. Additionally,  $\log \sigma_{mt}$  and  $r_{mt}$  are market log-volatility estimated using the Schwert (1989) method and market returns, respectively. Under the state space model,  $H_{mt}$  is defined as  $H_{mt} = \phi_m H_{mt-1} + \eta_{mt}$ . Finally, it is noteworthy that in order to estimate  $Std_c(\beta_{imt}^b)$ , we first obtain standard market model betas using daily return data within monthly windows.

Data

All necessary Saudi stock related data as well as macroeconomic variables such as the West Texas Intermediate (WTI) spot crude oil price, 90-day US Treasury bill rate and S&P 500 stock index values used in this study are retrieved from Thomson Datastream. Our cross-firm dispersion measures are based on daily stock price of constituent firms in the Tadawul All Share Index (TASI) of the Saudi Stock Exchange (Tadawul) over the period from January 2002 to March 2012. Data of 159 stocks are available from the Datastream. From this initial sample, we filter out stocks that have not been traded for at least six months. To alleviate the effect of non-trading on our results, we have also dropped stocks that remained non-traded consecutively for more than 30 days in their respective trading records. Consequently, we have ended up with 140 stocks in our final sample representing the Saudi stock market.

#### **EMPIRICAL RESULTS**

#### Return Dispersion And Herding

Table 1 presents the results of estimating equation (1). Using CSSD as the measure of dispersion and three cutoff points of 1%, 5% and 10% to define extreme market movements, Panel A, B and C of the table report estimates for the full sample period (Jan 2002 – Mar 2011), first sub-period (Jan 2002 – Dec 2006) and second sub-period (Jan 2007 – Mar 2012), respectively. We find that, except for the case when we apply 1% criterion to the second sub-sample data, our regressions yield consistently significantly positive  $\beta_L$  and  $\beta_U$  estimates for the full-sample and sub-sample periods. Thus, results indicate absence of herding in the Saudi stock market.

Table 1: OLS estimates using the Christie and Huang (1995) mod
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	Full-sampl	e		Sub-sampl	le-I		Sub-samp	le-II	
	1% tail	5% tail	10% tail	1% tail	5% tail	10% tail	1% tail	5% tail	10% tail
α	2.211***	2.010***	1.894***	2.332***	1.993***	1.826***	2.103***	2.026***	1.951***
	(26.64)	(36.17)	(37.05)	(14.76)	(20.78)	(20.93)	(31.78)	(33.14)	(34.08)
$\beta_L$	0.991**	2.331***	1.803***	1.375***	3.190***	2.534***	0.028	1.245***	1.040***
	(2.43)	(3.81)	(5.55)	(2.81)	(2.92)	(4.09)	(0.10)	(12.42)	(9.92)
$\beta_{II}$	0.705**	2.044***	1.552***	1.025***	2.988***	2.164***	-0.124	0.639***	0.705***
	(2.21)	(3.64)	(5.33)	(2.66)	(3.31)	(4.56)	(-0.50)	(6.52)	(9.17)
Ν	2507	2507	2507	1199	1199	1199	1308	1308	1308
R-	0.005	0.160	0.168	0.008	0.202	0.195	0.000	0.140	0.216
$H_{a}$ : $\beta_{L} = \beta_{U}$	0.360	1.329	2.887	0.310	0.170	1.566	0.222	30.580	9.056
<i>p</i> -value	0.548	0.249	0.089	0.578	0.680	0.211	0.637	0.000	0.003

This table presents the results of estimating the following regression using the full-sample (Jan 2002 – Mar 2012), first sub-sample (Jan 2002 – Dec 2006) and second sub-sample (Jan 2007 – Mar 2012) ally data:  $CSSD_t = \alpha + \beta_L D_t^L + \beta_U D_t^U + \varepsilon_t$  where  $CSSD_t$  is the equally weighted cross-sectional standard deviation,  $D_t^L = 1$  if market return at time t is in the extreme lower [upper] tail of the returns distribution, and equal to 0 otherwise. Extreme market return is defined as one that lies in the 1%, 5% and 10% lower or upper tail of the market return distribution. t-statistics based on the Newey-West robust standard errors are in parentheses. \*\*\*, \*\* and \* denote significance of the coefficients at 1%, 5% and 10% level-of significance, respectively. The Wald F-test statistic for the equality of parameters  $H_0 : \beta_L = \beta_U$  and corresponding p-value are reported.  $R^2$  is the adjusted  $R^2$ . N is the number of daily observations used in estimation.

Table 2 presents the results of estimating the non-linear specification of equation (2), in the spirit of Chang et al. (2000). In this specification,  $\gamma_1$  – the coefficient on the linear term  $|R_{m,t}|$  – shows whether dispersion of stock returns as measured by CSAD *increases* with the absolute value of market return and  $\gamma_2$  – the coefficients of the non-linear term  $R_{m,t}^2$  – indicates whether CSAD *increases linearly* with absolute market return. A statistically significant negative value of  $\gamma_2$  is consistent with herding.

Table 2:	OLS estimates	using the	Chang.	Cheng and	Khorana	(2000) n	nodel

	Full-sample	Sub-sample-I	Sub-sample-II	$H_0: \gamma_i^{ss1} = \gamma_i^{ss2}$	<i>p</i> -value
$\gamma_0$	0.918***	0.798***	1.008***	11.632	0.001
	(13.72)	(6.79)	(22.67)		
$\gamma_1$	0.658***	0.799***	0.562***	6.925	0.009
	(7.31)	(5.39)	(12.22)		
$\gamma_2$	-0.048***	-0.055***	-0.054***	0.011	0.918
• /	(-4.36)	(-3.68)	(-8.55)		
N	2507	Ì199 ´	1308		
R-	0.333	0.349	0.422		

This table presents the results of estimating the following regression using the full-sample (Jan 2002 – Mar 2012), sub-sample-I (Jan 2002 – Dec 2006) and sub-sample-II (Jan 2007 – Mar 2012) daily data:  $CSAD_i = \gamma_0 + \gamma_1 |R_{m_1}| + \gamma_2 R_{m_2}^2 + \varepsilon$ , where  $CSAD_i$  is the equally weighted cross-sectional absolute deviation on day t, and  $R_{m_1}$  is equally weighted portfolio return on day t. t -statistics based on the Newey-West robust standard errors are in parentheses. \*\*\*, \*\* and \* denote significance of the coefficients at 1%, 5% and 10% level of significance, respectively. The Wald F-test statistic for the equality of i-th parameter for sub-sample-I (SS1) and sub-sample-II (SS2),  $H_0$ ;  $\gamma_i^{SS1} = \gamma_i^{SS2}$ , and corresponding p-value are reported in the last two columns of the table.  $R^2$  is the adjusted  $R^2$ . N is the number of daily observations used in estimation.

We find that all parameter values of  $\gamma_1$  estimated using the full-sample and sub-sample data are significantly positive. Therefore, these coefficients *per se* tend to provide an initial support to our previous finding based on the dummy variable regressions in the sense that dispersion of individual returns increases with the absolute value of average market return. However, our concurrent finding of a statistically significant and negative  $\gamma_2$  estimate across different sample periods strongly rejects the prediction of the rational asset pricing model that dispersion of stock returns increases *linearly* with the average market return in absolute terms. A significantly positive  $\gamma_1$  coupled with a significantly negative  $\gamma_2$  suggest that as the average market return becomes large in absolute terms, CSAD increases non-linearly at a decreasing rate – a phenomenon which is consistent with the occurrence of herding.

In fact, under similar circumstances, CSAD may even decline once absolute market return goes beyond a certain threshold value. Notably, this particular scenario is also consistent with the intuition of Christie and Huang (1995). If investors suppress their own beliefs and make their investment decisions based on the collective actions in the market, this behavioral bias would overwhelm the effect of variation in the factor sensitivities of individual stocks during periods of extreme market movements and cause individual returns to cluster around the market return. Table 2 also reports Chi-square statistics and their associated p-values to test the null hypotheses that estimated regression parameters are equal across two subsamples of data. We find that the estimates of  $\gamma_2$  – our parameter of interest – are not significantly different, implying that the strength of observed herd behavior remains similar across sub-periods of analysis.

#### Asymmetry in Herd behavior

In this subsection, we investigate whether herd behavior documented above vary with market conditions. Some studies in behavioral finance also suggest that investors' trading behavior tend to vary across market conditions. For example, Grinblatt and Keloharju (2001) and Cooper, Gutierrez, and Hameed (2004) find indirect evidence that investors are more likely to enter the stock market when market returns are high. We test potential asymmetry in herding by using three different measures to distinguish market states - (i) up-versus-down market return, (ii) high-versus-low market turnover, and (iii) high-versus-low market volatility. For that purpose, we use the equation of following form:

$$CSAD_{t} = \gamma_{0} + \gamma_{1}(1-D) |R_{m,t}| + \gamma_{2}D |R_{m,t}| + \gamma_{3}(1-D)R_{m,t}^{2} + \gamma_{4}DR_{m,t}^{2} + \varepsilon_{t}$$
(4)

where D is the market state dummy with value 1 referring to (a) down market return defined as  $R_{m,t} < 0$ , or (b) low market turnover defined as market turnover on day t being lower than its previous 30-day moving average, or (c) low market volatility defined as market volatility on day t being lower than its previous 30-day moving average, and 0 otherwise. Therefore,  $\gamma_3$  ( $\gamma_4$ ) captures the degree of herding when (a) market return is up (down), or (b) market turnover is high (low), or (c) market volatility is high (low). Table 3 reports the results of estimating the specification of equation (4) to capture potential asymmetry in herd behavior. First, in Panel A of the table, we present results where asymmetric market conditions are distinguished in terms of the movements in market returns. Results show that the estimates of both the herding parameters  $-\gamma_3$  and  $\gamma_4$  – are statistically significantly negative across sample periods. Therefore, it appears that, no matter whether the market is rising or falling, the trading decisions of Saudi investors are significantly influenced by others in the market. More importantly, the test results of the null hypothesis  $H_o: \gamma_3 = \gamma_4$  across sample periods reveal that the tendency of investors to follow others is stronger when the market is rising than when it is falling. This finding may suggest that the correlated trading behavior in Saudi stock market is driven by market-wide investor sentiment.

	Panel-A Asymmetric return herding			Asymme	Panel-B Asymmetric volume herding			Panel-C Asymmetric volatility herding		
	Full sample	Sub-sample- I	Sub-sample- II	Full sample	Sub- sample-I	Sub- sample- II	Full sample	Sub- sample- I	Sub- sample- II	
$\gamma_{0}$	0.899*** (14.92)	0.764*** (7.31)	1.004*** (23.18)	0.962** * (21.71)	0.888** * (11.94)	1.005** * (22.84)	0.979* ** (21.98)	0.908** * (11.60)	1.015** * (22.79)	
$\gamma_1$	0.733***	0.922***	0.567***	0.714** *	0.834** *	0.625** *	0.582* **	0.681** *	0.532** *	
γ <sub>2</sub>	(10.57) 0.629***	(8.20) 0.739***	(15.02) 0.591***	(14.73) 0.479** *	(11.21) 0.508** *	(10.86) 0.512** *	(9.21) 0.537* **	(6.16) 0.597** *	(10.43) 0.547** *	
	(6.24)	(4.42)	(10.62)	(8.77) - 0.066**	(6.76) - 0.069**	(10.92) - 0.065**	(11.67) - 0.050*	(8.94) - 0.055**	(10.46) - 0.051**	
$\gamma_3$	-0.063*** (-7.37)	-0.076*** (-7.53)	-0.066*** (-13.00)	* (-8.72)	* (-6.10)	* (-7.71)	** (-4.99) -	* (-3.48)	* (-7.42)	
$\gamma_{\scriptscriptstyle A}$	-0.043***	-0.047***	-0.054***	0.030** *	0.029** *	0.046** *	0.025* **	0.029** *	0.043** *	
$\stackrel{N}{R^2}$	(-3.97) 2507 0.337	(-3.43) 1199 0.355	(-10.70) 1308 0.438	(-3.35) 2477 0.357	(-2.88) 1169 0.359	(-7.32) 1308 0.429	(-3.22) 2477 0.360	(-3.24) 1169 0.351	(-4.78) 1308 0.427	
$H_0: \gamma_3 = \gamma_4$ <i>p</i> -value	3.175 0.075	3.355 0.067	4.121 0.043	$\begin{array}{c} 16.700\\ 0.000 \end{array}$	12.130 0.001	7.373 0.007	4.590 0.032	2.612 0.106	1.059 0.304	

Table 3: OLS Estimates Using the Chang, Cheng and Khorana (2000) Model Allowing for Asymmetry

**p**-value 0.075 [0.067 0.043 0.000 0.001 0.007 0.032 0.106 0.304 This table presents the results of estimating the following regression using the full-sample (Jan 2002 – Mar 2012), sub-sample-I (Jan 2002 – Dec 2006) and sub-sample-II (Jan 2007 – Mar 2012) daily data:  $(SAD_{1} = \gamma_{0} + \gamma_{1}(1-D) | R_{m,1} | + \gamma_{2}D | R_{m,4} | + \gamma_{3}(1-D)R_{m,1}^{2} + \gamma_{4}DR_{m,1}^{2} + \varepsilon_{4}$ where  $(CSAD_{1}$  is the equally weighted cross-sectional absolute deviation on day t,  $R_{m,1}$  is equally weighted portfolio return on day t, and Dis the market state dummy with value 1 referring to down market return defined as  $R_{m,1} < 0$  (Panel-A), or low market turnover defined as market turnover on day t being lower than its previous 30-day moving average (Panel-C), and 0 otherwise. t -statistics based on the Newey-West robust standard errors are in parentheses. \*\*\*, \*\* and \* denote significance of the coefficients at 1%, 5% and 10% level of significance, respectively. The<sub>2</sub>Wald F-test statistic for the equality of herding parameters  $H_0: \gamma_3 = \gamma_4$  and corresponding p-value are reported.  $R^2$  is the adjusted  $R^2$ . N is the number of daily observations used in estimation.

Panel B and C of Table 3 present results under asymmetric conditions defined in terms of market trading volume and market volatility, respectively. Results show that all the estimates of herding parameters are significantly negative irrespective of the definitions of market condition and sample period we use. Additionally, the test results of the null hypothesis of  $H_o: \gamma_3 = \gamma_4$  in Panel B suggest that a greater tendency of herding is associated with a higher trading activity in the market. Obviously, this finding is not consistent with the information-flow interpretation of trading volume (see, e.g., Clark, 1973; Lamoureux and Lastrapes, 1990). According to this interpretation, information arrival is random and changes in trading volume reflect differential information. However, as Black (1986) notes, higher trading volume may also be the result of sentiment driven noise trading. Since our finding suggests a negative relationship of trading volume and return dispersion, it may be the case that trading volume serves as an observable signal that helps coordinate the action of herding in Saudi stock market. Finally, the results presented in Panel C provides us some evidence (full sample) that Saudi investors tend to follow each other more in times of more volatile market conditions.

#### Beta Dispersion And Herding

Table 4 presents the results from the Hwang and Salmon (2004) beta dispersion model in its original form as well as its two alternative augmented forms – one including additional market variables and the other including both the market and potentially important macro variables in Column-I, Column-II and Column-III, respectively. With regard to our results reported in Column-I, we first examine the important parameters of the state-equation of  $H_{mt}$ . We find that the estimate of  $\sigma_{m\eta}$  (the standard deviation of the

state-equation errors,  $\eta_{mt}$ ) is highly significant, which is consistent with our previous findings from the non-linear model and supports the existence of significant herding in the market portfolio over the sample

period. In addition, we observe that  $H_{mt}$  is also highly persistent with a large positive and significant value of  $\phi_m$ . Our estimate of the signal-proportion value ( $\sigma_{mn}$ /standard deviation of the  $\log[Std_c(\beta_{imt}^b)]$  series) indicates that herding explains around 70 percent of the total variation in the time-series of log-transformed cross-sectional standard deviation of observed beta. This estimate is considerably higher than that reported by Hwang and Salmon (2004) for the US market – roughly 40% using 1991–2002 data. A higher value of the signal-proportion implies that herding takes a relatively less smooth path in its evolution in the Saudi stock market.

The results presented in Column-II of Table 4 consider potential effects of the movements in market return and its volatility while extracting herd behavior from  $\log[Std_c(\beta_{imt}^b)]$ . Although the two market variables appear significant in the measurement equation, we still find a strong evidence of herding as the standard deviation of  $\eta_{mt}$  is significantly different from zero and  $H_{mt}$  continues to be highly persistent with a significant value of  $\phi_m$ . Column-III of Table 4 shows that among the additional factors, only the US T-bill rate has been found to have an impact on  $\log[Std_c(\beta_{imt}^b)]$ . More importantly, since we find that  $\sigma_{m\eta}$  is significantly non-zero along with a slightly deteriorated but highly significant persistence parameter  $\phi_m$ , we can conclude that there is significant herd behavior in Saudi stock market even after accounting for the simultaneous effect of the market and macro variables in our analysis.

	Column-I	Column-II	Column-III	
Measurement equation:				
$\mu_m$	-0.596*** (-9.76)	0.016 (0.16)	-0.047 (-0.50)	
${\cal C}_{m 1}$	().(0)	0.131 <sup>***</sup>	0.118**	
$\mathcal{C}_m$ ,		(2.45) -0.351*** (-7.01)	(2.26) -0.368*** (-7.20)	
C <sub>m 3</sub>			0.006 (1.15)	
$\mathcal{C}_{m\ A}$			(1.13) 0.001 (0.39)	
$C_{m,5}$			0.051** (2.13)	
$\sigma_{m,n}^{2}$	0.041* (1.57)	0.030** (1.95)	0.027* (1.38)	
State equation:	(1.57)	(1.95)	(1.56)	
$\phi_m$	0.584***	0.594***	0.498***	
$\sigma_{m n}^{2}$	(4.20) 0.074***	(3.81) 0.035**	(2.65) 0.037**	
0 <sub>m n</sub>	(2.20)	(1.88)	(1.62)	
signal: $\sigma_{m,n}$ / SD( ln[Std_c( $\beta_{imt}^{v}$ )])	69.081	47.565	48.858	
log-likelihood	-46.334	-11.704	-8.602	
schwarz information criterion	111.92	52.28	60.51	2002 / 1/

Table 4: Estimates Using the Hwang and Salmon (2004) Model with and without Conditioning Variables

Schwarz mioniauon chierion function for the following state space model using monthly data over the period from January 2002 to March 2012:  $\log[Std_c(\beta_{int}^{o})] = \mu_m + H_{mt} + c_{m1}\log\sigma_{mt} + c_m 2r_{mt} + c_m 3OIL_{mt} + c_m 4INT_{mt} + c_m 5r_{mt} + v_m H_{mt} = \phi_m H_{mt-1} + \eta_{mt}$ , where  $\log[Std_c(\beta_{int}^{o})] = \mu_m + H_{mt} + c_{m1}\log\sigma_{mt} + c_m 2r_{mt} + c_m 3OIL_{mt} + c_m 4INT_{mt} + c_m 5r_{mt} + v_{mt} + m_{mt} + m$ 

#### CONCLUSION

We investigate whether herd phenomenon exists in Saudi Arabian stock market, where domestic individual investors dominate stock trading. Unlike most previous studies, we employ the linear and non-

linear models of the dispersion of stock returns as well as alternative specifications of the state-space model of the dispersion of estimated stock betas in our investigation.

While our linear testing methodology based on return dispersion shows no evidence of herding, alternative implementations of the non-linear model indicates a widespread prevalence of herd behavior among the investors. Although Saudi investors are found to herd to take their investment decisions irrespective of different market conditions, their behavioral bias tends to get stronger in periods of rising market return, trading volume and volatility.

Our results based on the state-space models of beta dispersion further corroborate the findings from the non-linear model of return dispersion. At the same time, these models of beta dispersion also yield some additional insights. First, by conditioning return co-movements automatically on fundamentals, it suggests that the observed cross-sectional co-movements in Saudi stock returns do not reflect possible correlated movements in stock fundamentals. The evidence of herd behavior remains significant even when we further condition the movements in beta dispersion to the effects of several market-related and macro variables. Second, since our state-space models of beta dispersion provide evidence of a persistent and slow-moving herd behavior utilizing monthly data, herding in Saudi stock market is not necessarily a short-lived phenomenon occurring at only daily or intra-daily frequency. This study also shows that Saudi investors are prone to herd both under the turbulent as well as tranquil market conditions.

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## ABSTRACT

This paper investigates the relevance between executive compensation and earnings management of listed companies in China using discretionary accruals, and based on the assumption that executive compensation contract could react significantly differently to extraordinary items and ordinary items. The sample is composed of 5806 firm-years observations from 2006 to 2010. The findings support the prior empirical research that executive compensation and discretionary accruals have positive significance correlation, which indicates that managers prefer to use discretionary accounting choices especially for extraordinary items to increase their compensation, so that to achieve the goal of earnings management. Additionally, the results also demonstrate the correlation between earnings quality and the contract of executive compensation. Therefore, after the analysis of the whole sample, we think that to standardize earnings management and improve the contract of executive compensation are two important tasks for the listed companies in China.

**KEYWORDS**: earnings management; executive compensation; discretionary accruals; earnings quality; extraordinary items.

## **INTRODUCTION**

Recently, with the development of securities market, accounting information distortion has been a conspicuous problem in China. Among these information distortions, some belong to the violation of the accounting standards, and others are caused by earnings management. A common definition of earnings management is that:

"Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports, to either mislead some stakeholders about the underlying economic performance of the economy, or to influence contractual outcomes that depend on reported accounting numbers". Healy and Wahlen (1998)

Generally, because of the asymmetric information between managers and stakeholders, managers could adopt earnings management to pursue self-interest maximization. Namely, the main motivation of earnings management is to match or evade the supervision and control of the government, and meet the qualification of IPO and share allotment, the "security shell" demand and so on. The general method of earnings management is usually represented by discretionary accruals manipulation. Particularly, for the special regime in Chinese securities market and the particular relationship among listed company, its parent company and government, the public company is easy to undertake earnings management through government subsidies, related-party transaction and property recombines such one-off and occasional projects, which normally arise extraordinary items exist in financial statements.

The main purpose of this paper is to investigate the relationship between incentive-based compensation and earnings management which measured by discretionary accruals in China's listed companies. Specially, it examines the effects of extraordinary items which imply the handling surplus and deficit by managers, and to check whether executive compensation contract can react significantly differently to extraordinary items and earnings before extraordinary items.

## LITERATURE REVIEW

The conflict of interest between companies' dispersed shareholders and directors who are hired to determine the overall operations and strategies is the central tension in the corporate governance. The separation of the ownership and management creates the opportunity of discretionary accounting choices to executives. Healy (1985) is the first person to explicitly indicate the adoption or modification of managers' bonus plan might cause the changes in the accounting procedures, and income-reporting incentives which based on their bonus contracts were associated with accrual policies. Thereafter, other studies from many researchers (Holthausen et al., 1995

a similar conclusion. In addition, Shuto (2007) found that the use of discretionary accruals correlated positively with Japanese executive compensation, and the analyses of his results showed that firm managers preferred to adopt income-decreasing accruals and extraordinary items when they received no bonus. At the meantime, evidence demonstrated that this correlated relationship would change with different firm circumstances.

The similar investigations have been done on the problem of managers' payment in China as well. Wei (2000) conducted an empirical examination which used the sample composed of 816 A-stock listed companies in 1999. He found that the phenomena of 'zero compensation' and 'zero stock holding' for managers were serious and common. Due to highly limited executive compensation, it was difficult to discover whether firm value was significant positive with executive compensation. Chen et al. (2005) noticed that there existed the controls of executive payment in China. Because of the occurrence of this situation, company-paid consumption was highly likely to be chosen by managers in Chinese state-owned listed company, thus reducing the firm value. The control of executive emolument led company-paid consumption to be the alternative choice of managers, and the lack of incentive effect was significantly existed in state-owned listed companies. Furthermore, Li et al. (2007) used the cross-sectional adaptation of the modified Jones model to measure the degree of earnings management by discretionary accruals. What they examined was the relationship between management compensations, the supervision of the board of directors and earnings management. They discovered the positive relationship between management compensation and the total discretionary accruals under the control of the assets size and debts levels of Chinese listed companies. However, to decrease reported earnings there was no significant evidence to show that the supervision of board directors could hold the extent of earnings management. While to increase reported earnings a negative relationship existed between those two elements.

Additionally, Barnea et al. (1976) examined American companies and found managers had the tendency to make extraordinary items into different partitions based on operating performance in order to smooth the profit. Other countries also confirmed the similar results. Graig & Walsh (1989) made empirical analysis on extraordinary projects of public companies in Australia. Their findings demonstrated companies which had continuously increasing profit tend to decrease current profit through extraordinary items. Meanwhile, the bigger the size of the company is, the higher the possibility of such behavior will be. Walsh et al. (1991) found Australian companies used extraordinary to take a 'bathing' so as to make profit reserve for future twisting deficit. However, after the financial crisis, Min et al.

(1998) used the sample of companies in Singapore and discovered that the results did not support the hypothesis that extraordinary items were used in earnings management. In additional, Vasiliki et al. (2010) found that in order to satisfy the analysts, companies reversed the core expense into extraordinary projects. Simultaneously, there is no correlation between extraordinary items and future operating performance through the entire sample. Here, the researches on extraordinary items in China are frequently. Wei (2000) definitely pointed out that one of the methods of earnings management is

extraordinary items, and this was the first paper to examine this topic in China. Jiang & Wei (2001) suggested companies with ROE higher than 0 and lower than 6% had higher proportion of extraordinary items divided by net income. Furthermore, Mao & Shen (2009) examined the relevance between earnings quality and CFO compensation of listed companies in China. The results showed that significantly distinction was reflected by CFO compensation between extraordinary items and earnings before extraordinary. However, it was failed to reacts differently to accruals and operating cash flows in their first study. Then they trended to test a subsample and the findings indicated that because the current compensation plan assigned the inappropriate weights to extraordinary items and earnings before extraordinary items, earnings management was more probably to be made by CFOs in eliminated loss firms.

## METHODOLOGY

#### <u>Data</u>

The sample is selected from the period between 2006 and 2010 using the GTA Database, which contains 5806 firm-years observations from 1373 listed companies in Shanghai and Shenzhen Stock Exchange. In order to make the data more accurate, the sample of financial industry has been eliminated. Meanwhile, based on the consideration of prudent principle, we make data processing on the extreme value according to 'Winsorize' method (at 1% upper and lower).

#### Variables Measurement

In order to investigate the relationship of earnings management and executive compensation, executive compensation would be researched as dependent variable, while independent variables are earnings that embodied earnings management, discretionary accruals, extraordinary items and ordinary items. According to the analysis of the past literatures in China or overseas, executive compensation also effects by operating cash flow, firm size, return on assets, the characteristics of the actual controller of the listed company, the debt to asset ratio and industry classification, etc. Therefore, these variables would be controlled for the accuracy of research as the control variables.

In this study, earnings denote the comprehensive income disclosed by financial reporting of the listed companies, which include extraordinary items and ordinary items. Here, extraordinary items are generated by non-daily transactions and events respectively, and ordinary items are the net profit, which can be disaggregated as accruals and operating cash flow. And at present, executive compensation accurately disclosed by financial reporting of Chinese listed company only means the obtained monetary compensation, and not include the benefits that are generated by stock or other incentives. Due to the unsatisfactory measurements of some incentives such as option and stock, the companies implemented stock incentives only occupies minority by 2010, and the value of such incentive is difficult to determine. Therefore, it can be considered that the compensation disclosed by financial reporting adequately represents executive compensation.

## Hypotheses

From studies above, it shows that with the development of China security market, some new characteristics of managerial compensation in listed company have been appeared, and the relationship between the executive payment and accountancy information quality is remained to be discussed further. In particular, Chen (2009) said that researchers usually assumed that the improved extent of compensation was one of the fundamental inducements in earnings management of listed companies, but the direct investigation about the influence of executive compensation on accounting quality was scarce. For the firms' contract of compensation, accounting performance was significantly related with executive

payment. If managers believed that the discretionary accounting policy could increase their compensation level which based on the compensation arrangement of accounting performance index, they would have the motivation to achieve this goal by using the increasing-income choices under discretionary accounting policy. Therefore, the first hypothesis arises,

Hypothesis 1: Under the control of influence on non-discretionary accruals and cash flow, discretionary accruals are significantly positive correlated with executive compensation.

For further examination of the relationship between executive compensation and earnings management, we also need to discuss the proxy used by managers to achieve earnings management. Wei et al. (2007) used the sample of A-stock listed companies in China to research the behavior of these companies which utilized extraordinary items to conduct earnings management, and found no matter the company was deficit or surplus, it quite relied on extraordinary items to attain earnings management. The main purpose of losing companies was twisting deficits or to avoid loss, while high surplus companies was to smooth profits or refrain from the decrease of profits. The empirical results also demonstrated the influence on twisting deficits or even continuous loss in the future by extraordinary items was really important, and the effects were much bigger than discretionary accruals after extraordinary items. Therefore,

Hypothesis 2: Extraordinary items are strongly associated with earnings management.

Furthermore, earnings in accounting report include two parts, extraordinary items and ordinary items. Ordinary items are the profit or loss during the daily operational activities in business, and it has sustainability and stability because of its role of the core of earnings in business. According to this, investors could forecast the profitability of a company in the future and estimate the ability of going concern. While extraordinary items are occasional and one-off, it will be difficult to investors to forecast the future development prospect of the business. Li & Zhang (2003) examined an empirical study indicated that investors has distinguished extraordinary items from earnings, so that they could evaluate earnings quality in listed company. Due to the different characteristics in the sustainability of earnings between extraordinary items and ordinary items, the distinct forms should be reflected effectively on executive compensation, not only just focus on the values of total earnings in accounting report.

Hypothesis 3: The executive profit-oriented incentive compensation mechanism can distinguish effectively between extraordinary items and ordinary items in Chinese listed companies.

# Model

The estimation of discretionary accruals follows the approach used in studies by Peasnell, et al. (2000, 2005), denoted PPY hereinafter. They use a cross-sectional version of the modified Jones model and focus on working capital accruals rather than total operating accruals. Their rationale for this focus is that systematic earnings management via the depreciation accrual is likely to have limited potential (see Beneish, 1999). Therefore, this paper follows PPY directly, and according to Jones (1991) and Al-Attar et al. (2008), an equation can be established by lagged total assets:

$$WC_{j,s,t} = \alpha_{0,s,t} + \alpha_{1,s,t} \left( \Delta REV_{j,s,t} - \Delta REC_{j,s,t} \right) + \tau_{j,s,t}$$
(1)

Where  $WC_{j,s,t}$  denotes working capital accruals for firm j (in sector s and year t), and also denotes the change in non-cash current assets minus the change in current liabilities;  $\Delta REV_{j,s,t}$  denotes the change on revenues from year t-1 to t;  $\Delta REC_{j,s,t}$  denotes the change in receivables from year t-1 to t;  $\alpha_{0,s,t}$  and  $\alpha_{1,s,t}$  are the model parameters estimated for sector s and year t;  $\tau_{j,s,t}$  is the residual error which denotes discretionary accruals. In order to examine the correlation between executive compensation and earnings management, one model has been established as follows which based on the previous theories:

$$Comp = \beta_0 + \beta_1 DAC + \beta_2 ROA + \beta_3 ROA^2 + \beta_4 OCF + \beta_5 Debt + \beta_6 SOE + \beta_7 Control + \beta_8 Indep_director + \beta_9 Size + \beta_{10} Industry + v$$
(2)

The definition of the variables is showed as Table 1.  $\beta_0$  denotes the constant of the models;  $\beta_1 \dots \beta_9$  denote the regression coefficients of related explained variables, and v is the stochastic disturbance of the model. Through this model, we could verify whether executives choose discretionary accruals to increase their compensation or not. If this situation could be confirmed, it implies the close relevance between executive compensation and earnings management. So that enterprises should pay more attention to the means used by managers to manipulate earnings such as extraordinary items, and organize the effective implementation of policy to standardize earnings management.

Research on Hypothesis 2 is rare abroad. Even though China has more research literature, the most of them are purely academic and just some are based on empirical data. Among them, Wong & Huang (2010) used the different shares of debt restructuring earnings, operating income after impairment provision, disposal of intangible assets in total amount of extraordinary items to analyze the impact of these factors on earnings. However, their paper mainly examines the relationship between executive compensation and earnings management, and this hypothesis only plays a complementary role. In our study, we disaggregate ordinary items into discretionary accruals, non-discretionary accruals and operating cash flow, and extract the following model to test the relationship between extraordinary items and discretionary accruals:

$$Comp = \beta_0 + \beta_1 extra_{items} + \beta_2 DA + \beta_3 NDA + \beta_4 OCF + v$$
(3)

There are two models establishing under Hypothesis 3. Firstly, we could check the correlation between executive compensation and earnings which based on the corporate governance structure in China, and understand whether incentive contract of compensation are founded on earnings indexes. Then it is proposed to evaluate the relationship between executive compensation and earnings quality. According to the persistence of different parts in earnings which are previously described, the earnings would be disaggregated into extraordinary items and ordinary items. And it is assumed if  $\beta_{1<}\beta_2$ , it means the weight of extraordinary items is less than the weight of ordinary items in incentive contract of executive compensation:

$$Comp = \beta_0 + \beta_1 earnings + \beta_2 OCF + \beta_3 Size + \beta_4 RET + \beta_5 SOE + \beta_6 Industry + v$$
(4)

$$Comp = \beta_0 + \beta_1 extra_items + \beta_2 Ordi_items + \beta_3 OCF + \beta_4 Size + \beta_5 RET + \beta_6 SOE + \beta_7 Industry + v$$
(5)

## **RESULTS AND DISCUSSIONS**

### **Descriptive Statistics**

Table 2 demonstrates the descriptive statistics of the sample. The average executive compensation of 5,806 samples is ¥671,143, and the median is ¥490,000. This presents the right skewness of data which means a heavy tail of large values (As Figure 1). Simultaneously, it detects that the gap of executive compensation has been enlarged continuously through the analysis of high quartile. By comparison with the mean and median of other three variables except DA, we find each of their kurtosis is high, and there is higher density of distribution around the average than any other where. Meanwhile, the phenomenon of right skewness also exists. However, the left skewness of DA shows heavy and long tail of small values which may because the negative values of discretionary accruals are too large especially the minimum value (As Figure 2). Table 3 presents the cross-correlation of the main variables.

It is apparent that executive compensation is positively correlated with discretionary accruals, and this relationship is closer than others. The largest correlative coefficient in this table is 0.5740 which denotes discretionary accruals are significantly correlated with operating cash flow. The reason for this may be that managers usually manipulate discretionary accruals to change cash flow related with daily operations in order to make earnings management. From Table 4, it shows that most of accounting earnings in public companies have extraordinary items. The number of companies of which net income includes extraordinary item and ordinary items is 1373, nearly 92.79 of the total sample size, in which extraordinary items play an important role. This illustrates the total quality of accounting earnings is low in Chinese listed companies.

	Code	Name	Definition
Dependent variables	Comp	The executive compensation	The compensation of the top three executives each year. Comp=ln(Compensation at each year-end)
Independen t variables	DAC	Discretionary accruals	Calculated by PPY model
	Earnings	Total earnings	Comprenhensive income
	Extra_items	Extraordinary items	Profit or loss generated by non-daily transactions and events
	Ordinary	Earnings before extraordinary	Profit or loss generated by daily transactions and events
Control variables	items ROA ROA <sup>2</sup> OCF Debt SOE SIZE RET Control	items Return on assets The square of ROA Operating cash flow Debt to asset ratio The nature of the actual controller The size of the listed company Stock return per year The chairman is the CEO	The ratio of return on the total assets The square of the ratio of return on total assets Cash flow generated by operating activities The ratio of debt-to-asset State-owned listed company is '1', and Non-state-owned listed company is '0' Size=ln(The total assets at the year-end) The ratio of the stock return per year The chairman and the CEO are the same person is'1'. Not the same person is '0'
	Indep_ director Industry	The ratio of the No. of the independent director The industry of the listed company	The ratio of the number of independent directors divided by total number of directors Manufacturing industry is '1'. Others is '0'

Table 1: Summary of Variables

## Compensation, Extraordinary Items & Discretionary Accruals

According to Table 5, it is apparent that t-value of discretionary accruals correlated with executive compensation is 3.07 which means the significant positive relationship exist. For discretionary accruals as the proxy of earnings management here, therefore, it illustrates executives utilize earnings management to obtain their self-interest expressed as executive compensation. In addition, the most significant correlation exists between size and executive compensation as the t-value is 33.63. This demonstrates that the size of company is still the main reason to influence executive compensation in China. Also, the findings show the 5% level of significant correlation between executive compensation and all variables respectively. In conclusion, the results from Equation (2) verifies the Hypothesis 1 that earnings management is used by executives to gain their compensation. It means the system of supervision is not thorough, and company should take some measurements to standardize earnings management.

It is also obviously from Table 6 that discretionary accruals are significantly related with extraordinary items. The correlated coefficient is 0.293 which is much higher than other numbers in the table. That is to say, there exists the positive relationship between extraordinary items and earnings management. Therefore, Hypothesis 2 is evidence-directed in this approach.

## Earnings Quality & Compensation--The Analysis For The Whole Sample

Panel A of Table 7 lists the results of the regression in the whole sample size 5806. Similar with previous researches in China, it exist positive relationship between executive compensation and earnings indexes, which means executive compensation incentive system based on earnings indexes has been established elementarily in Chinese listed company so far. The t-value of earnings is 4.63 which illustrates executive compensation is significantly correlated with earnings at the 5% level of significance. This evidence of significant correlation prepares the ground for the examination of the relationship between executive compensation and earnings quality. In other words, the research on the correlation with executive compensation and earnings quality is builds on the precondition that earnings is served as the performance index of executive compensation.

Panel B of Table 7further verifies the correlation of executive compensation and the two parts of earnings, extraordinary items and ordinary items. In other words, it examines the relationship between earnings quality and executive compensation. (Extraordinary items have low earnings quality while ordinary items have high earnings quality.) According to the results of regression, the t-values of extraordinary items and ordinary items are -2.90 and 4.43 respectively. This means one is negatively correlated and the other one is positively correlated with executive compensation at 5% level of significance. Furthermore, the coefficient of extraordinary items is much lower than ordinary items, and together with the significant difference between these two, it testifies that executive compensation contract could react significantly differently to extraordinary items and ordinary items. It also demonstrates the ordinary items, which have higher stability and sustainability and have high quality of earnings, are given more weight ( $\beta_{1<}\beta_2$ ). Through the test of the whole sample, we find the system of executive compensation governance has been improved a lot, and the compensation incentive system based on earnings is established elementarily. Executive compensation contract has significantly distinguished extraordinary items and ordinary items a

### Earnings Quality & Compensation--The Analysis For The Twisting Deficits Sample

As it says in the introduction, the main approaches of earnings management which utilized by public companies include government subsidies, related-party transaction and property recombines, provision of impairment and so on. After further analysis, it finds that the behavior of executives is closely relevant with the means of earnings management: the appraisal of disposal assets depends on executives' professional judgment; preferential policies such as government subsidy need executives to struggle; impairment provision is 'the largest private plot' for executives using professional skills to reach the goal of earnings management. Therefore, we treat extraordinary items as the standard, and select a set of data to be the research objective, which is the sample of 636 deficits companies.

According to Table 8, we find executive compensation of twisting deficits companies and earnings have positive significance correlation.(t-value is 3.42) It also illustrates the implementation of the executive compensation incentive system which based on earnings in twisting loss companies has been done. However, the correlated regression results between executive compensation and the two parts of earnings which are extraordinary items and ordinary items differ from our expectation. Although the executive compensation incentive contract has distinguished extraordinary items and ordinary items slightly, it is positively correlated with extraordinary items which have low earnings quality (t-value is 2.81).

## CONCLUSION

This paper establishes three hypotheses and testifies the relationship between executive compensation and earnings management step by step. Firstly, after the analysis of the entire sample, we find the companies' supervision and management are not perfect in China and managers usually use earnings management to

gain their own profit which represented as executive compensation in this paper. This demonstrates that earnings management should be standardized by some measurements in Chinese public companies.

Secondly, in order to set the stage for the further study of earnings quality with executive compensation contract, we assume that extraordinary items are the main means used by managers to achieve the objective of earnings management. According to the previous research and findings though the special methods used by this paper, it verifies this hypothesis that extraordinary items are positively related with earnings management. Therefore, it is valuable to examine whether earnings quality which represented by extraordinary items and ordinary items are closely related with executive compensation or not.

Thirdly, after the whole sample analysis of the two models in the third hypothesis, we find that the incentive system of executive compensation which based on earnings is founded elementarily. The results confirm the positive correlation between earnings and executive compensation is significant. Meanwhile, the contract of executive compensation has distinguished effectively between extraordinary items and ordinary items, and gives high quality earnings, ordinary items, much more weight. This is useful and incentive for companies to do more efforts on ordinary items. Furthermore, after the analysis of twisting deficits sample, we find the different correlation compared with the entire sample. Extraordinary items are positively correlated with executive compensation while the whole sample shows they have negative relationship. But executive compensation contract still reflects the differences between extraordinary items and ordinary items slightly. In conclusion, we think that Chinese listed companies should take some measurements to standardize earnings management especially for extraordinary items. In the meantime, the incentive system of executive compensation should attach importance to distinguish extraordinary items and ordinary items in earnings, and give them corresponding and reasonable coefficient or weight to restrain the behavior of earnings management in the public companies, particularly for those twisting deficits listed companies.

## **Limitations**

As in the introduction, some studies do not support that discretionary items could represent earnings management. For instance, Zhang (2002) verified that deferred tax expense was better able to use than discretionary accruals were. However, for this paper, we assume that earnings management is represented in discretionary accruals. Therefore, there exist some limitations to some extend in this situation. In additional, the R<sup>2</sup> in this paper are not very high. For example, regression in Hypothesis 1 has 0.2033 R<sup>2</sup>. Similarly, R<sup>2</sup> in Hypothesis 3 are 0.2182, 0.2185, 0.1988 and 0.1966 respectively. It means the goodness of fit is not very high, which still needs to improve. Thirdly, from Table 4, it is apparently that the number of companies of which net income has no data on extraordinary item and ordinary items is 99, nearly 7.21% of the total sample size. This illustrates net income index cannot completely reflect companies' real level of performance. In further study, we can attempt to remove the sample of companies with deficient data, and then compared with the results in this paper to research whether it exist difference and why.

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## APPENDIX

Table 2: Descriptive Statistics Results of the 5,806 samples

	Comp	DA	Extra items	Ordinary items	Exp(SIZE)
Average	671143	-13	14058818	120042421	3654815270
Minimum	10800	-52376548621	-3721000000	-3732649180	1408532
25%Quartile	266000	-107108641	-203544	827899	915326262
Median	490000	4592816	3000086	27071217	1686420148
75%Quartile	844000	107473860	14625083	86742658	3322778332
Maximum	10459700	18303681581	4559000000	35996000000	520572000000

Figure 1:

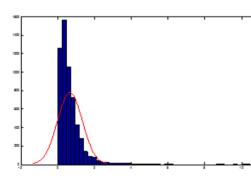


Figure 2:

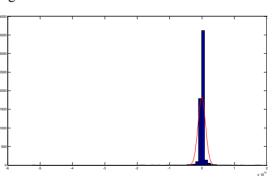


Table 3: Descriptive Statistics Results of the 5,806 samples

	COMP	DA	OCF	DEBT	SOE	ROE	Industry
COMP	1	.018	.094**	048**	004	.058**	095**
DA	.018	1	128**	.005	010	.007	008
OCF	.094**	128**	1	009	.042**	.020	.026*
DEBT	048**	.005	009	1	037**	016	012
SOE	004	010	.042**	037**	1	.017	.029*
ROE	.058**	.007	.020	016	.017	1	.000
Industry	095**	008	.026*	012	.029*	.000	1

\*\*. Correlation is significant at the 0.01 level (2-tailed). \*. Correlation is significant at the 0.05 level (2-tailed).

	The number of companies	The weight of extraordinary items
Extraordinary items > 0	869	63.29%
No data	99	7.21%
Extraordinary items < 0	405	29.5%
In total	1373	1

Table 4: The distribution of extraordinary items from 2006 to 2010

Table 5: Regression results

Source	SS	df	MS	5		Number of obs F(10, 5796)	
Model Residual	854.209883 3348.23401	10 5796	85.4209 .577680			Prob > F R-squared	= 0.0000 = 0.2033
Total	4202.4439	5806	.723810	523		AdjR-squared Root MSE	= .76005
comp	Coef.	Std.	Err.	t	P> t	[95% Conf.	Interval]
dac	3.78e-11	1.23e	-11	3.07	0.002	1.37e-11	6.19e-11
roa	.1621786	.0219	688	7.38	0.000	.1191116	.2052456
roa_square	.0037831	.00052	238	7.22	0.000	.0027562	.0048101
ocf	-1.93e-11	5.29e	-12 -	3.64	0.000	-2.96e-11	-8.89e-12
bebt	.0134759	.0042	803	3.15	0.002	.0050849	.0218668
soe	1081879	.0244	294 -	4.43	0.000	1560786	0602971
control	.077633	.0311	512	2.49	0.013	.016565	.1387011
indep_dire~r	.924538	. 1916	906	4.82	0.000	.5487529	1.300323
size	.344051	.01	023 3	33.63	0.000	.3239964	.3641055
industry	1812904	.0203	074 -	-8.93	0.000	2211004	1414803
_cons	5.595368	.2234	291 2	25.04	0.000	5.157364	6.033373

Table 6

	COMP	Extra_items	DA	OCF	SIZE	NDA
COMP	1	.094**	.147**	.094**	.413**	.004
Extra_items	.094**	1	.293**	003	.088**	.020
DA	.147**	.293**	1	.894**	.339**	016
OCF	.094**	003	.894**	1	.312***	004
SIZE	.413**	.088**	.339**	.312**	1	006
NDA	.004	.020	016	004	006	1

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 7	Panel A
Table /	Panel A

Source	SS	df		MS		Number of obs		5807
Mode1	916.902381	6	152.	817064		F( 6, 5800) Prob > F	=	269.77
Residual	3285.55563	5800	.566	475109		R-squared	=	0.2182
Total	4202.45801	5806	.723	812954		Adj R-squared Root MSE	=	0.2174
comp	Coef.	Std.	Err.	t	P> t	[95% Conf.	In	terval]
earings	1.22e-10	2.616	-11	4.67	0.000	7.09e-11	1	.73e-10
ocf	-6.64e-11	1.22e	-11	-5.44	0.000	-9.03e-11	-4	.25e-11
size	.3009373	.0101	895	29.53	0.000	.280962	-	3209126
ret	.2202163	.0186	188	11.83	0.000	. 1837 165		2567161
soe	1287645	.0240	313	-5.36	0.000	1758749		0816542
industry	1882859	.0201	.031	-9.37	0.000	2276956		1488763
_cons	6.835104	.214	334	31.89	0.000	6.41493	7	.255279

Panel B

Source	55	df	MS	:	Number of $obs = 5807$ F(7, 5799) = 231.62
Model Residual	918.243453 3284.21456	7 1 5799 .	31.177636 566341534		(7, 575) = 251.62 Prob > F = 0.0000 R-squared = 0.2185 Adj R-squared = 0.2176
Total	4202.45801	5806 .3	723812954	i	Root MSE = .75256
comp	coef.	Std. Er	r. t	P> t	[95% Conf. Interval]
extra_items ordinary_i~s ocf size ret soe industry _cons	-2.52e-10 1.19e-10 -5.93e-11 .3010337 .2182046 1290328 1876259 6.831898	8.69e-1 2.68e-1 1.14e-1 .010183 .018653 .024029 .020110 .214166	1 4.43 1 -5.22 1 29.56 5 11.70 5 -5.37 6 -9.33	0.004 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-8.17e-11 -4.22e-10 6.62e-11 1.71e-10 -8.15e-11 -3.70e-11 .2810709 .3209964 .1816368 .2547725 1761397081926 22705021482015 6.412052 7.251744
Table 8					
Panel A					
Source	SS	df	MS		Number of obs = 636 F(6, 629) = 26.02
Model Residual	92.4794332 372.624293	6 629	15.4132389 .592407461		Prob > F = 0.0000 R-squared = 0.1988 Adj R-squared = 0.1912
Total	465.103726	635	.732446813		Root MSE = $.76968$
comp	Coef.	Std. E	irr. t	P> t	[95% Conf. Interval]
earings ocf size ret soe industry	2.97e-09 -1.91e-10 .3186695 5314265 2770906 0417471	8.70e- 9.19e- .03095 .28319 .07050 .06238	11 -2.08 19 10.30 66 -1.88 41 -3.93	0.001 0.038 0.000 0.061 0.000 0.504	1.26e-09 4.68e-09 -3.72e-10 -1.09e-11 .2578879 .3794512 -1.087552 .0246988 41554251386386 1642531 .0807589
_cons	6.39902	.63500	79 10.08	0.000	5.152027 7.646012
Panel B					
Source	SS 91, 4353068	df 7	MS		Number of obs = $636$ F(7, $628$ ) = $21.95$ Prob > F = $0.0000$
Residual	373.668419	628	13.0621867		Prob > F = 0.0000 R-squared = 0.1966 Adj R-squared = 0.1876
Total	465.103726	635	.732446813		Root MSE = .77137
comp	Coef.	Std. E	i <b>rr.</b> t	P> t	[95% Conf. Interval]
extra_items ordinary_i~s ocf size ret soe	2.37e-09 3.56e-09 -8.09e-11 .3412593 2797978 284457	8.45e- 1.13e- 9.26e- .03103 .27369 .07062	-09 3.14 -11 -0.87 302 11.00 996 -1.02	0.005 0.002 0.383 0.000 0.307 0.000	7.15e-10 4.03e-09 1.33e-09 5.78e-09 -2.63e-10 1.01e-10 .2803239 .4021947 8172749 .2576794 423142145772
industry cons	0456303 5.974468	.06258		0.466 0.000	1685292 .0772686 4.726594 7.222342

# A STUDY OF SUSTAINABLE BEHAVIORS AMONG CALIFORNIA HISPANICS REGARDING TRANSPORTATION

Mary Beth McCabe, National University Ramon Corona, National University Richard Weaver, National University

# ABSTRACT

Hispanics represent a significant and growing population segment in the United States, (56% of all population growth) and California represents the largest percentage of Hispanics (37%). This research concentrated on learning more about Hispanics and their sustainable behaviors regarding transportation, both public and private. By studying Hispanic transportation behaviors, marketers can understand their future needs, supplying the products/services through effective promotional media channels. This project allowed researchers to identify behaviors of Hispanics in California regarding green transportation and the media that influences them. We studied the use and purchase patterns of hybrid vehicles, the use of car pools and public transportation, current gas mileage (mpg) and media they prefer. We found that Hispanics drive hybrids slightly less than non-Hispanics. There is a somewhat higher preference for the next purchased car to be a hybrid for Hispanics than for non-Hispanics. In addition, fewer Hispanics use public transportation or a car pool than non-Hispanics. We believe that the conclusions from this exploratory study will help marketers of transportation services in the public and private sectors. We expect that because of this pilot study, discussions and additional research on Hispanics and sustainable transportation will occur.

**KEYWORDS**: Sustainable transportation, hybrid vehicles, Hispanic Marketing, sustainable behavior, green transportation, marketing strategies, shared transportation, green advertising, mpg, eco-friendly.

# INTRODUCTION

In the 2010 Census, Hispanics represented over half of the population growth (56%) of the United States, and California represents the largest percentage of US Hispanics (37%). This study uncovers more details about segments of Hispanics and their sustainable behaviors regarding public, i.e., government and private, i.e., commercial transportation and related industries. We researched Hispanics vs. non-Hispanics personal use of hybrid vehicles, miles per gallon (mpg), and modes of transportation. Hispanic transportation behavior studies such as this can help marketers understand future needs of this segment and therefore provide crucial information for decision-making.

## **REVIEW OF LITERATURE**

## Hispanic Culture And Marketing

Family, religion, language, and music are important to Hispanics. (Meneses, 2011) Hispanics use products with less attachment to schedules and timeframes, and enjoy the moment. It is an advantage to be poor but happy rather than rich and unhappy. Income levels lag, with the percentage of households with incomes over \$100k indexed at half of the general population. However, for many Hispanics, just have enough to get by is satisfactory. Hispanics cultural values retain optimism, enhance human experience, and embrace spirituality. (Korzenny, Korzenny, 2005)

## Hispanic Education And Income Levels

In California, 81% had a high school diploma in 2005, ranking #46 out of 50 states. However, for Bachelor's Degrees, California ranks #10 with 31%. For masters or additional education/degree, there were four million out of 50 million in the West. Looking at who is enrolled in school, over 3 years of age, Blacks ranked highest, 34%, Hispanics 32% and Whites 26% (2005 results). (Gauquin, Ryan, 2007) Companies trying to target high income Hispanics should understand their behaviors regarding environmental practices. Affluent Hispanics (\$100k+) generally used less water and recycled more waste than non-Hispanics. These same affluent Hispanics had a higher incidence of solar water heaters (23% vs. 5.7%) of non-Hispanics. (McCabe, Corona, Weaver, 2012)

## Green Automobile Trends

We are spending a higher percentage of our income on transportation than we have in the past. Living in sprawling urban areas has put U.S. families in the car more often to get to work, shopping, and recreation. Since 1991, America's total transportation bill has grown faster than inflation (Katz, Puentes, 2005) Rising gasoline prices are forcing American drivers to consider using mass transit, an electric car, moving, or changing their job. Moreover, one in three consumers would consider purchasing a higher mpg vehicle if the price of gasoline rises to more than \$5 per gallon. (Jacobe, 2011) Eco friendly beliefs can translate into improved transportation utility. Sustainable transportation is promoting our environment. Those who live in green communities have more sustainable travel experiences than others. (Kahn, Morris, 2009) Becoming more aware of the environment can improve sustainable behavior, such as more car pooling, mass transportation and hybrid use.

Why are people in California buying hybrid electric vehicles? They are concerned about 1) the environment, 2) energy efficiency, 3) global warming, 4) price of gasoline, and 5) high occupancy vehicle (HOV) lane use while driving alone. A statewide survey found that people wanted energy and the environmental information to be included in the marketing materials. (Sangkapichai, Saphores, 2009)

A California study found that even if fuel prices double, individuals are more likely to change their vehicle choice (i.e., higher mpg) than their driving patterns or usage. (Spissu Pinjari, Pendyala, Bhat, 2009) A recent study predicts global growth for hybrid vehicles of 20% through 2015. The reasons for this include more worldwide oil consumption and government initiatives, as well as buyers' awareness and acceptance. Consumers know more about the green benefits of driving a hybrid, including less carbon emissions and less of a dependence on oil as a natural resource. However, the higher cost and longer breakeven point of a new hybrid are sales barriers. (Newcomb, 2012)

## Hispanics And Transportation Reform

Household vehicle consumption growth is expected to increase by 31% over 25 years to 235 million cars. More white non Hispanic and Hispanic homes will acquire vehicles than black non-Hispanic and Asian and other non Hispanic Households. The South and the West will have the greatest growth in new vehicles. (Feng, Wang, et al, 2011) Out of 15 eco-friendly activities, the fewest responded to "own or lease a hybrid vehicle" by both non-Hispanics and Hispanics in a 2011 Scarborough study report in California. Hispanics index at 24 compared to the general population, due to the large financial commitment and high involvement in the product purchase. (McCabe, Corona, 2011)

There are currently dozens of hybrid autos to choose from, including hybrid-gasoline-electric and fuel cell technologies. Americans, including US Hispanics, are making the purchase decisions on these vehicles, and businesses need to be audience relevant in their marketing messages. (Deen, 2003)

*Is Green Advertising Appealing?:* If someone is considered "green" or eco-friendly to begin with, his or her involvement with the environment is greater. A laundry detergent study concluded that the green involved group had no significant differences for environmental benefit vs. cost-saving benefit print advertising. However, for those not already involved with the environment, the green appeal was more persuasive than the cost appeal considering purchase intent, attitudes, and support arguments. (Schuhwerk, Lefkoff-Hagius, 1995) The conclusions here are that those who are not already green thinking could be appealed to by specific advertising.

## Are Hispanics Willing To Pay For Eco-Friendly Products?

Those who rate concern for waste as highly important are willing to pay more for eco-friendly products. Educational strategies for different consumer groups, with a goal of a healthier environment are presented. Willingness to pay differs across demographic groups, with African Americans willing to spend significantly more than Caucasians on eco-friendly products. (Royne, Levy, Martinez, 2011) Hispanics participate in eco-friendly activities that require less personal or financial investment. They also do more with a financial reward, such as recycling cans or bottles and reducing their electric bill using energy efficient light bulbs. (McCabe, Corona, 2011)

*Hispanics and their media habits:* For marketers trying to reach Hispanics, TV is fundamental; however, competition is expected to expand, especially among digital and interactive channels. (Korzenny, Korzenny, 2005) For radio, Spanish Contemporary (Romantic, Baladas) is the most preferred format among Hispanics followed by Mexican Regional (Banda, Rancheras) in the West and Southwest US regions. (Meneses, 2011) Radio was something of a folk carrier for Hispanics for education about finances, cooking, etc. (Korzenny, Korzenny, 2005) Hispanics like to read news, and younger, more acculturated Hispanics will be using the Internet for sports news, such as soccer, baseball, and boxing, and for national and international news. For Hispanics without Internet access, newspapers in hard copy will be preferred. In addition, Hispanic consumers surf channels seeking entertainment, education and to satisfy their interests, in both English and Spanish languages. (Meneses, 2011) Overall, Hispanics prefer TV and the web for media, and non-Hispanics selected magazines/newspapers and web. Facebook® ranked about the same for both Hispanic and non-Hispanic, but Twitter® is only used by 5% of Hispanics, vs. 18.4% for non-Hispanics. (McCabe, Corona, Weaver, 2012)

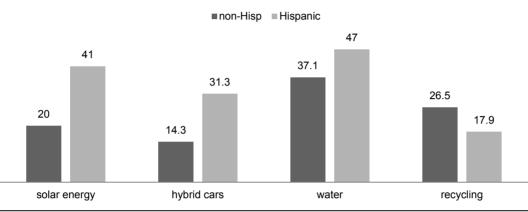
## METHODOLOGY

This research was designed as an exploratory study of the similarities and differences between Hispanic and non-Hispanic attitudes towards sustainability and their engagement in associated transportation activities. A convenience sample was utilized, drawn from contacts maintained by the three researchers and databases of members of a variety of Hispanic professional organizations. While convenience sampling has known limitations, such as not being representative of the larger population, this approach has been used productively in other studies, especially exploratory research. Particular attention to sample selection insured including a sizable proportion of known Hispanics from those invited to participate. The survey instrument collected behaviors such as green activities and interests plus standard demographic information. The instrument was tested and appropriate modifications increased both clarity and ease of completion. Potential responders were invited via email to participate. The instrument was made available utilizing SurveyMonkey.com over a two-week period in November 2011. Approximately 310 invitations were sent to potential responders. 144 completed the survey. This constituted a 46% response rate. Of these, 29 were discarded due to respondents not being residents of California. The remaining responses were sorted, tabulated, and correlated using standard statistical processes.

## RESULTS

We have identified attitudes of Hispanics in California regarding green transportation and the media that influence Hispanics. Results include the usage and purchase patterns of hybrid vehicles, the use of car pools and public transportation, current gas mileage (mpg) and media preferences.

Figure 1: High Income Who "Always" Pay Attention To Information (%)

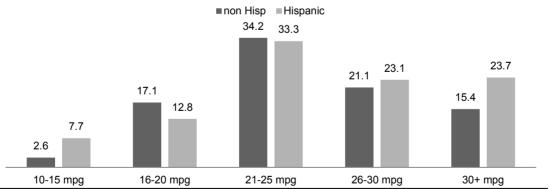


High Income Who "Always" Pay Attention to Information (%)

Regarding hybrid cars, high income Hispanics "always" pay attention 31.3% of the time vs. 14.3% of high income non Hispanics. More than two times the percentage of respondents who are Hispanic are "always" paying attention to information on hybrid cars. This difference is significant, and near the same level of difference as solar energy (41% for Hispanics vs. 20% for non Hispanics). Of the four categories listed, the most attention is paid to water and then solar energy. Hybrids rank third, ahead of recycling.

Figure 2: Mileage Per Gallon in Primary Vehicle Driven (%)

Mileage Per Gallon in Primary Vehicle Driven (%)

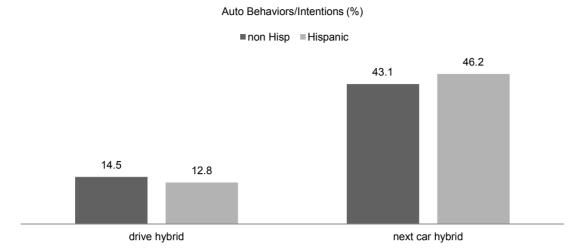


This figure shows the miles per gallon for the primary vehicle driven, comparing Hispanics to non Hispanics.

Overall, Hispanics are driving cars with lower mpg and higher mpg. Non Hispanics are more likely to drive cars with gas mileage between 16-20 mpg. 17.1% of non Hispanics and 12.8% for Hispanics drove their primary vehicle with this mileage per gallon. The mpg averages are not significantly different for the 21-30 mpg (34.2% for non Hispanics and 33.3% for Hispanics).

This figure shows the high income Hispanics vs. high income non-Hispanics and their attention level of "Alsays" for four categories.

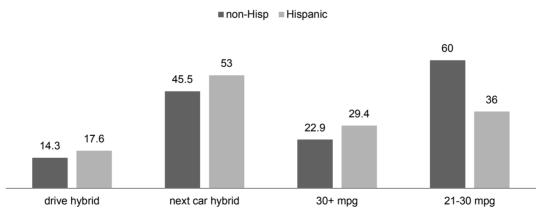
## Figure 3: Auto Behaviors/Intentions (%)



This chart shows the current vehicle owned and the intended purchase behavior for hybrids, comparing Hispanic and non Hispanic.

As shown in Figure 3, Auto Behaviors/Intentions, 12.8% of Hispanics currently drive a hybrid, compared to 14.5% of non Hispanics. However, 46.2% of Hispanics plan to buy a hybrid for their next car, vs. 43.1% for non-Hispanics. This is a significant jump in intentions for both groups, which would lead researchers to look for a spike in hybrid sales for the next two to three years, for both Hispanics as well as non Hispanics. There is not a significant difference between the demographic groups for this behavior and intended behavior.

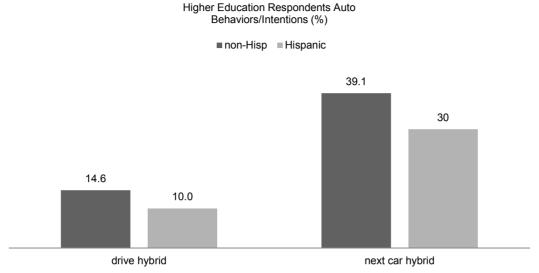
Figure 4: High Income Respondents Auto Behaviors/Intentions (%)



High Income Respondents Auto Behaviors/Intentions

This chart shows the high income behaviors and intentions, and mpg, comparing Hispanics and non Hispanics.

When looking at Hispanics earning \$100k and greater in Fig 4, we see a pattern of driving a hybrid and planning to purchase a hybrid. In both categories, Hispanics rank higher than non Hispanics. Hispanics with higher incomes tend to purchase and plan to buy hybrids at somewhat higher percentages than non Hispanics. We also see a difference in 21-30 mpg driving among high income Hispanics (60%) vs non Hispanics (36%). Similar to Figure 2, Hispanics rank higher in the 30+ mpg category than non Hispanics.

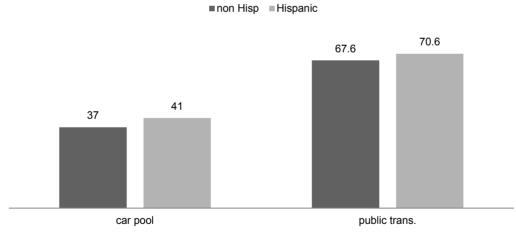


## Figure 5: High Education Respondents Auto Behaviors/Intentions (%)

This figure shows the percentage of those with higher education, comparing Hispanics to non Hispanics on their owning or intending to purchase a hybrid vehicle.

Unlike the income factor in Figure 4, Hispanics with higher education (Figure 5) are less likely to drive a hybrid or to purchase a hybrid for their next vehicle. 10% of Hispanics with a higher education are driving a hybrid vs. 14.6% of non Hispanics. 30% of Hispanics with higher education are planning to buy a hybrid, vs. 39.1% of non Hispanics.

Figure 6: Never Use Shared Transportation (%)

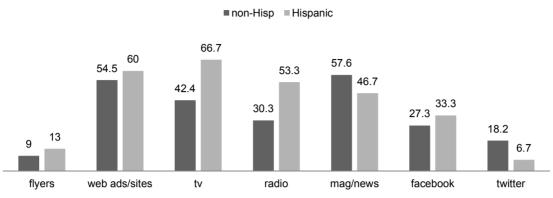


## Never Use Shared Transportation (%)

This figure shows those who do not use a car pool or public transportation, comparing Hispanics to non Hispanics.

Of all Hispanics surveyed, 41% never use a car pool, vs. 37% for non Hispanics. 70.6% of Hispanics surveyed never use public transportation, and of non Hispanics, 67.6% never use public transportation. These findings indicate that Hispanics are slightly less likely to use shared transportation than non Hispanics. Note that this study was conducted in California, and that state has been known to enjoy private transportation overall rather than other parts of the United States. In many areas of California, there is no public transportation.



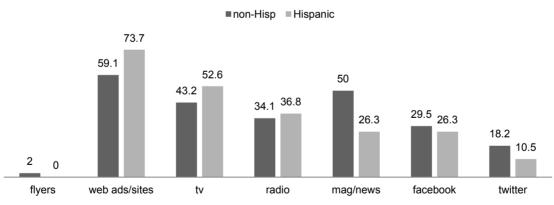


High Incomes Media Preferences (%)

## This figure shows media preferences for high incomes, Hispanics vs. non Hispanics.

The chart above describes the high earning Hispanics vs. non Hispanics choices for media to inform them about environmental issues. Hispanics with high incomes selected TV as their primary choice for media information, followed by websites and radio. Non Hispanics selected magazines/newspapers as their preferred information source. Web sites were their second and TV third choice. High Income non Hispanics used radio (30.3%) and Facebook® at 27.2%. Twitter® usage is lower for higher income Hispanics (6.7% vs. 18.2%) for non-Hispanics.

Figure 8: Higher Education Media Preferences (%)



#### **Higher Education Media Preferences**

This figure shows media preferences for high incomes, Hispanics vs. non Hispanics.

The chart above describes the highly educated Hispanics vs. non Hispanics choices for media to inform them about environmental issues. Hispanics with high education selected web ads/sites as their primary choice for media information, followed by TV and radio. Non-Hispanics selected their second choice as magazines/newspapers with TV third choice. Highly educated Hispanics do not prefer to read magazines/newspapers. Facebook® and radio preferences are similar. Twitter® usage is lower for highly educated Hispanics (10.5% vs. 18.2%) for non-Hispanics.

2013

## **Discussion And Implications**

Green issues are among the many concerns of the world's population. Hispanics represent a significant and growing part of the US population, and California has been a bell weather state for environmental issues. In studying the behaviors of Hispanics, we learned about three areas of eco-friendly attitudes and behaviors: automobile trends, public transportation usage and media preferences. Among the most relevant findings, here are the following:

1) Nearly one third (30.3%) of high income respondents who are Hispanic are "always" paying attention to information on hybrid cars (Fig. 1) vs. 14.3% of non Hispanics in the same income category. This is a significant finding showing that Hispanics with money are seeking information about this product category, and twice as likely to pay attention always to information to news and marketing information on hybrid vehicles. Marketers who are interested in attracting the Hispanic segment should take note of the level of interest for their future advertising campaigns. Many high income Hispanic respondents (Fig. 4) are interested in buying or already drive a hybrid car. This segment of the market could be a very valued one for manufacturers and dealers of hybrids.

2) Hispanics resemble non Hispanics in the area of mpg for the most part. They differ slightly on the lower mpg and higher mpg (both are higher for Hispanics). Hispanics get more miles per gallon of gasoline or they get less mileage on their primary vehicles, however, for the most part, the patterns are similar.

3) High income Hispanics prefer TV and then websites for information (Fig 7). High income non Hispanics prefer newspaper/magazines to electronic media. High education Hispanics prefer websites well above any other media, with TV second (Fig 8). Highly educated non Hispanics answered that they prefer websites first and then newspapers/magazines as second choices. This is an indication that if you want to reach Hispanics, one media channel for high income and a different media channel for high education Hispanics may see hybrid cars on TV and make their choice from this exposure only. In addition, highly educated Hispanics may seek more detailed information that one can find online, before shopping for their hybrid car. The findings from this exploratory study of Hispanics and their transportation habits and intentions will help marketers in the government and commercial segments of commerce. Because of this study, the opportunity for further discussions and additional research to be conducted on Hispanics and their sustainable transportation needs is encouraged, available, and welcome.

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# ABSTRACT

This paper presents an analysis about the types of leadership and their relationship with organizational effectiveness in small construction enterprises of Puebla. In order to know the characteristics and styles of leadership, an analysis of various authors related to the topic was practiced as the theoretical basis, so that, later, some aspects that were measured through a Likert-scale questionnaire, with a sample of 49 small construction businesses, could be taken. The goal of the research is to describe how the leadership styles, in the small construction businesses located in Puebla, are perceived, along with how to determine their relationships with the organizational effectiveness. Thus, the following research question arose: What is the type of leadership that dominates the small construction businesses of the small construction businesses, and the types of leadership? The results of the investigation show that there is a positive and significant correlation between effectiveness, and democratic leadership, and Laissez-faire leadership. The regression model used explains 69.1% of the variations in effectiveness. In addition, there is no statistical evidence of omitted variables (the constant test = 0. 914).

KEY WORDS: Styles of leadership, organizational effectiveness, small businesses.

# UNDERSTANDING THE DYNAMIC OF THE ENTREPRENEURIAL PROCESS: THE INNOVATIVE ENTREPRENEUR AND THE STRATEGIC DECISIONS

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# ABSTRACT

Literature regarding to the process of firm's start-ups has supported the idea that the entrepreneur fulfills a key role in the economic development, because of his strategic vision and as a result of his capacity to generate innovations, but also employment and economic growth. Nevertheless, recent empirical studies, have mainly tackled the process from the demand perspective, with focus on institutional, economical and context aspects that favours or hinders the development of the entrepreneurial capacities. In this sense, the entrepreneur's role, his skills, his decisions and actions have been less observed from the economical field and from the strategic decision area. Even though the debate about the importance of recognizing the subjectivity forecasting of the key drivers that impact and define the observed phenomenon is increasing. The aim of the article is to understand the innovative entrepreneur's role in the entrepreneurial process through the use of a biographic design method, so as to identify throughout his life the way he decides to initiate a firm, how he experiences the process and evaluates its performance. For that reason, it is proposed to analyze Enrique Eskenazi's entrepreneurial life, Grupo Petersen's President, one of the leading economic groups in the Argentinean business arena. His public recognition is associated to the YPF S.A's shares purchase in 2008 – the Leader oil company in the Argentinean market -, which has been recently nationalized.

JEL: M10- M20

Key Words: Entrepreneur- biographic design method- strategic-decision making

# **INTRODUCTION**

Several authors have investigated aspects related to the firm's start up's process, its stages, moments and subsequent performance (Reynolds 1991; Reynolds et al. 2005, Acs, 2006, between others). The relevance of understanding this process lays in the predominant role that fulfills the entrepreneurs in the capitalist system development, given its skills to innovate and create employment and economic growth. Literature's evolution has shown the different models that explain this phenomenon. In a first stage, the firm's start up theory based in the analyze through supply's perspective (*pull factors*), that is to say, relating psychological elements, natural traits and personal motivation/incentive that drives an individual to begin its entrepreneurship (Mc Clelland, 1961; Gartner, 1989). Recently, specially due to the Global Entrepreneurship Monitor's creation (GEM) and the development of statistic information that permits a comparison of the entrepreneurial activity in different countries and regions, the theoretical and empirical contributions have been focused in the analyses of push factors.

That is, institutional and market conditions that attract entrepreneurial vocations to certain environments and no others (Álvarez and Urbano, 2012). In this sense, it is observed an important peak of the institutional analyses of entrepreneurship associated to an empirical investigation's enforcement carried out through aggregated and quantitative information. Even though the scope of statistics favored the comparison and the development of politics for entrepreneurs, these restrains the entrepreneur's approach from an comprehensive and holistic view that integrate his actions and intentions, its natural and personal traits and his relationship with the environment where he socializes and detects entrepreneurial opportunities. The purpose of this article is to connect the hypothesis of the entrepreneurial risk management and agile style management as a fuel to economies in the world. In order to expand this, it is proposed to analyze Enrique Eskenazi's entrepreneurial life, Grupo Petersen's President, one of the leading economic groups in the Argentinean business arena.

His public recognition is associated to the YPF S.A's shares purchase in 2008 – the Leader oil company in the Argentinean market-, which has been recently nationalized. Because of that, this paper proposes to implement a narrative approach, identifying the principle events that define his entrepreneurial career. The novelty and contribution that provides this method is its limited use in the entrepreneurial arena, even when relevant authors in the field have emphasized its relevance (Gartner, 2010). The paper is structured in the following way. In the first place, we resume the main theoretical lineaments from the Austrian perspective that analyzes the entrepreneur's figure from an active role. In the second place, we briefly describe the method, but also the entrepreneur's analyze and the results obtained from the given data. Finally, an entrepreneurial decision model is developed and its conclusions.

## Austrian Entrepreneurs And Market Opportunities. Theoretical Framework.

Since the beginning of the marginalism revolution, the Austrian perspective has emphasized on the relevance of human action in explaining economic decisions. In fact, Mises (1980) built a theory based on *praxeology*. The idea of this perspective is that individuals take decisions according to their objectives, subjective valuations and specific knowledge about the world. Furthermore, those characteristics imply a dynamic and uncertain context that often is not in equilibrium, where knowledge is disperse, pragmatic and tacit. Therefore, is not possible to explain economic relations considering a static and deterministic context as neoclassic economy sustained their arguments.

Moreover, Austrian economists pointed the following traits that describe economic agents: 1) specific knowledge of their preferences and opportunities; 2) subjective interpretation of the economic facts and other agent's behaviors; 3) subjective expectations of future events; 4) active engagement in new unexploited opportunities. Summarily, market competence is promoted by different agents that know different things, manage disperse and incomplete information, sometimes in an adversarial mode. As Hayek (1998) argued, market competence is a discovery process. The searchers of new opportunities (new products or incremental innovations of existent ones) are entrepreneurs. Therefore, market competition is an entrepreneurial process; profit maximization is the exploitation of a new economic opportunity and the entrepreneur, the key economic agent in the economic system.

According to Kirzner (1973), sellers and buyers act in and entrepreneurial mode. That is, they exercise the competence of taking decisions, searching for new products and changes to pursue and maintain economic benefits. As neoclassic explanations ignore the consequences of the existence of uncertainty, the market competence is unreal. Knight's ideal (1933) situation of perfect competence has omitted the consequences that emerge from uncertainty's existence, being the intelligence and the entrepreneurial capacity the responsible of its existence "in situations in which there are no correct proceedings so as to decide what to do". Individuals should create their own structures to comprehend a decision and it is not a rational choice's process but it depends on human intelligence's traits (Loasby, 2006: 33).

In this sense, Knight joins the entrepreneurial function, a human intelligence's trait, with uncertainty or non insurable risk. In fact, this author calls entrepreneur to who decides in a company, without being the owner, because he assumes the chance that this independent entrepreneur may not invest capital in his business, just providing his work in such a sense that the capability of gaining money is his principal guarantee. From a similar perspective, Kirzner (1973) assumed that Mises's human action is an entrepreneurial action, in the sense that is capable of discovering, innovating, predicting or appreciating opportunities in a dynamic and competitive world, where agents purchase their personal interests. The entrepreneurial activity and profits arise from instability conditions from different individuals plans; conditions that the entrepreneur captures and tries to manage with his actions. Consequently, his entrepreneurial activity is basically a coordination activity of the different personal projects, owed to his imagination and audacity. Thus, for Kirzner (1998), the entrepreneur is the agent who is seeking for opportunities and throughout his intervention reestablishes equilibrium in the market. Therefore, the entrepreneur, as a key agent for market equilibrium's evolution and attainment. According to Kirzner (1999), the entrepreneur's role is essentially creative, develops new information where he perceives that there is a profit opportunity that the market notifies through prices, in the sense that agents learn the way they should act; coordinating their activities.

Kirzner (1973) believes that it is not an entrepreneur the one who knows how and where to buy cheap sources and where to sell them at higher prices or which are the market's technological advances. If its role was confined just to manage existing information, profits would tend to be eliminated in an equilibrium situation. On the other hand, if it is taken into account that knowledge is disperse and incomplete, it infers that from this imperfection, business opportunities may emerge. In line with this concept, this author considers that taking advantage of available information is not what characterize an entrepreneur but its perspicacity, that is to say, to know where he should seek the information for taking de most efficient and appropriate decision; that is, without knowing exactly what is looking for and without undertaking any delivered action of research, he is constantly watching over, prepared and ready to seek for new discoveries and profit opportunities. Fort the rest, only in a capitalist or opened economy, the entrepreneur may develop his perspicacity, arbitration and to be the driving force that motivates the markets's development (Baumol, 2003; Casson 1993).

## METHODOLOGY

We develop a biographical study combining primary data (in-depth interview) and secondary one (documents) highlighting the main aspects related to entrepreneurial decisions. The method of research allows us to deeply understand Enrique Eskenazi's leadership strengths (Gartner, 2010), covering his first years as a child, providing educational and family values to all his career stages/experiences. Placing as specific lends on risk management as well as companies's acquisitions.

In-depth interview made to this role model of entrepreneurship and also based on the documentary analysis of his autobiography, it clearly lays out the key factors that impact in the process of start up, its restructuring, expansion and diversification. By describing the different moments in his business's life and of each decision of new firms' acquisitions, this research inquires in the model of decision making that defines the entrepreneurial dynamic, the key elements in the process and the entrepreneurial qualities shown in each observed moment. The results show that behind the decision of firms' purchase there is a innovative entrepreneur leader that is constantly seeking for new opportunities in the market, and agile and innovative style that makes the big difference in business growth, manages information and networks, assumes risks, faces challenges of solving problems, makes strategic planning, makes innovation in process through companies' restructuring and devotes his life to develop his entrepreneurial personality assuming challenges when entering to diversify markets. Therefore, innovative entrepreneurs have great impact on economic growth in any market, industry or global business context.

The interview was done in February 2012 in YPF's Company. For analyzing the decisions strategy we identify the central categories using Glaser and Strauss (1999) methodology. Firstly, doing an axial codification analysis and, secondly, a selective codification with the main categories. The validation is guaranteed by the saturation of categories, the transcription of the interview, the triangulation of researchers and sources of information for the interpretation of data.

## RESULTS

Enrique Eskenazi's career for sure started when he was ten years old. As we know family values are key to drive behaviours. His father, Isaac Eskenazi, gave him a tray full of toys, and said "*if you want to buy any candies or magazines, you should sell those toys in the neighbourhood*". This upbringing approach taught Enrique Eskenazi how to manage efficiently his working capital since he was very young, and early injected him his entrepreneurial decisions. He would also define himself, as a "*curious and naughty*" whom would love to call people's attention, so temper is key as well.

Another important piece of his life was that his parents had migrated from Istanbul to the province of Santa Fe, Argentina, so from this experience he internalized the concept of risk and a complete change of the family life. "*The concept of risk thrills me, I believe that if there is someone who exposes is the person who migrates, because abandons its roots over a dream's base…*"

Nevertheless, not everything diminishes to taking risks. In the interview shared with us, he, very humbly mentioned that although he acquired knowledge after some unsuccessful episodes, luck has also been on his side. "It is impossible to deny that before, during and after everything I could say, there is a factor that installs, a kind of diva between factors, that is the good luck. It is only in hazard's function –that neither philosophies, nor economists - can explain some results of entrepreneurial life".

We also understand, in this paper that formal education, training and experience in big companies are fundamental to consolidate the skills and capabilities for an innovative leader of this nature. He took up chemical engineering in the Universidad Nacional del Litoral, (UNL) and the good chance of requiring a trainee gave him the opportunity to have his first and foremost contact with the multinational Bunge & Born group (first multinational company in Argentina). Starting off with his twenty four years he drove his whole career in this group to get to the general manager position. His almost thirty years gave him the chance to expand his knowledge as a businessman, take advanced courses in the USA, manage diverse industries, and in this way gave him more confidence and expertise in the enterprise arena. In this period of his life, he got married with Sylvia who has relentlessly supported him around his career life.

It is natural in human beings to stay in the comfort zone, but a true entrepreneur challenges this concept, in the very best professional momentum Enrique Eskenazi had as a general manager in Bunge & Born he decided to resign and focus his entrepreneurial instinct to new business path and fulfilling his dream of becoming an independent businessman. "It came a time in my career, where I had reached to the general manager's position, I was a guy with prestige and I said I want to make my ultimate stage of my career as an entrepreneur". Giava FBR S.A, was the company that pushed Enrique Eskenazi in his entrepreneurial dream come true -A food machine's consultancy, manufacture and sale company-, it was partnered with Italian businessmen. Though the company was very well managed, the economical and political instability didn't help, so he continued seeking for further opportunities. "The food industry's businessmen knew me and also I'd been one of the founders of an organization that was called COPAR, that for the very first time I gathered together all the food industry and all that gave me an affection with honesty, prestige and also an upright mainstream, typical from Bunge & Born".

At that moment, Enrique Eskenazi met Carlos Alberto Petersen, owner of Petersen, Thiele & Cruz Arquitectos & Ingenieros, a very important firm that was on the edge of bankruptcy, and offered him the

management of the company. Because of his knowledge in the subject and the prestige reached in the field, the management of the company is given to this innovative entrepreneur. At the same time, this entrepreneur visualizes a great opportunity, buying stock from shareholders that withdrew from the company. Finally, Carlos Alberto Petersen and Enrique Eskenazi remain as partners and owners from this company.

It is interesting to go in depth in this purchase's decision, considering that thereafter, this innovative entrepreneur generated big decisions, completely restructured and turned around the company. The results, for assuming such a risk, have been extremely satisfactory for the entrepreneur. Each businessman needs to have the accurate balance of risk management, he must recognize were and how to play with it on his daily decisions. "I remember that in certain moments of crisis some of the stockholders wanted to sell stock because they were exhausted. So I started to buy them because I honestly saw that Petersen had an excellent future in the mid-term".

As per this new job, he starts expanding in new and different fields. The first diversification carried out by Enrique Eskenazi from Grupo Petersen is related to the financial area. This innovative entrepreneur identified as essential to support the different Argentinean economic areas such as agrarian and mining industry by creating a regional bank. There are several reasons for that: due to costs reduction, a specialized bank for different industries. Furthermore, profits would stay in the area and reinvested in the sector and would not be rerouted to the city. In line with this strategy he didn't hesitated about the decision of acquiring San Juan's bank in 1996; since then a multiple bank acquisitions: Santa Cruz Bank in 1998, Nuevo Banco de Santa Fe in 2003, Nuevo Banco de Entre Rios, in 2005. More importantly is to mention, that these acquisitions had been made in a critical context of the financial sector. The '90, was a decade in which the financial sector had a really poor profitability. Moreover, state-owned companies have started being privatized. So, this entrepreneur, with his team takes the opportunity to participate in these biddings behind bank acquisition and thereafter having restructured. Within this financial move, he modified the name of the company as Grupo Petersen. Another relevant strategic driver is a very smart networking within the business arena, Enrique Eskenazi shows how important is, with a wide spread of examples within his experience throughout strategic associations with investors.

"We began to develop the idea of organizing a regional bank so the money didn't continue flowing to Banks in the city of Buenos Aires or to the Gran Buenos Aires. These were absorbing an important percentage of the profits that were produced by the country. That is, the concept was that the capital stayed in the region where it was produced for, from there, obtaining profits for the simple fact that in the regional banks the money has no other chance than being re-invested in the area. The key consists in retaining the money in the province's area."

Consistent with his innovative thinking process, he enters in the agricultural wine production industry, Santa Sylvia, approximately in the year 2000. He was foreseeing a strong global demand with the entrance of Asian countries. It is interesting the way, at the in-depth interview, the entrepreneur rescues the role of farmers, supporting the idea that they are the real innovative entrepreneurs, who take constant risks. What demonstrates also, that this innovative entrepreneur value the person who is capable of taking risk. This is, for him, a fundamental and necessary trait that has to have an innovative entrepreneur.

"Argentina is a country with great possibilities because there are four riches. There are agrarian riches that are the Argentinean basis because it is a combination of capable people, that even they seem to be ignorant they assume risks, that are the true entrepreneurs, that are the agricultures, big, small, mediumsized....and that they give a mainstay to Argentinean growth, with the world's needs and more now with the inclusion of the Asian countries. The other riches are mining, energy and education." In line with the idea exposed above, the decision of entering to the energetic industry becomes the third stage of Grupo Petersen's diversification. It is a quantum leap that Enrique Eskenazi makes, the acquisition's decision, in this case, of YPF S.A shares in 2008. Is extremely important, because of the dimension of the transaction but also because of it is a national emblem for Argentina. Repsol owned approximately 85% of the stock, first Enrique Eskenazi acquired 10%, and then, in 2011 acquired an additional 15%. YPF S.A. (*Yacimientos Petrolíferos Fiscales*) was established in 1922 as a state-owned company. The company has dedicated, from its establishment, to exploration, distillation and oil sale. Afterwards, in 1992 the company is privatized. Therefore, six years later, Repsol, a Spanish company, makes the acquisition. Since May 3<sup>rd</sup> of 2012, the company returned to the government's hands. This generated an international commotion not only between the governants from different countries, that showed their annoyance but also from others that demonstrated their support to this decision. Enrique Eskenazi explained the dimension of this transaction, and background of YPF S.A. historical data.

"The decision of acquiring YPF meant a great leap for our company: we joined up to one of the most important energetic companies in Latin-America. Diversifying in a key industry, with an important growth potential for the country's development....This activity represents a sustainability base of commodities food's industry that characterize the country".

Taking into account the interpretation and the obtained elements from the interview and the documentary given by the entrepreneur, we could analyze Enrique Eskenazi's life stages as well as professional and business milestones. Such as it is summarized inn the following comparative table.

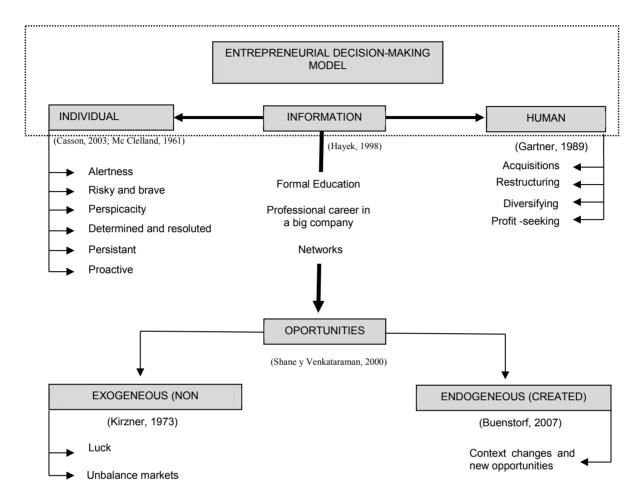
C1	C2	C3	C4	С5
Decision	Decision's description	Entrepren eurial traits	Opportunities's detection	Extract that relates C3 & C4
Decision N°1: becoming a businessm an	Giava FBR S.A -A food machine's consultancy, manufacture and sale company-,it was partnered with Italian businessmen.	risky brave network persistant freelance independen t	FBR, italian firm - dedicated to machine's manufacture for the food industry- proposes an association with Enrique Eskenazi, because of its prestige and knowhow acquired in Bunge & Born	"The food industry's businessmen knew me and also I'd been one of the founders of an organization that was called COPAR, that for the very first time I gathered together all the food industry and all that gave me an affection with honesty, prestige and also an upright mainstream, typical from Bunge & Born".
Decision N°2: Great challenge	Petersen, Thiele & Cruz Arquitectos & Ingenieros, a very important firm that was on the edge of bankruptcy offered him the management of the company.	challenging seeker knowhow prestige working capability nework	This entrepreneur visualizes a great opportunity, buying stock from shareholders that withdrew from the company.	"I remember that in certain moments of crisis some of the stockholders wanted to sell shares because they were exhausted. So I started to buy them because I honestly saw that Petersen had an excellent future in the mid- term".
Decision N°3: Diversific ation 1° stage: FINANC E	The first diversification carried out by Enrique Eskenazi from Grupo Petersen is related to the financial area. In line with this strategy he didn't hesitated about the decision of acquiring San Juan's bank in 1996.	seeker determined creative forward looking approach	This innovative entrepreneur identified as essential to support the different Argentinean economic areas such as agrarian and mining industry by creating a regional bank. There are several reasons for that:	"Resuming Grupo Petersen's idea of creating regional banks, the group supports the idea of unifying banks, either by aqcquiring banks or by making strategic associations, because our goal is to work in common servicesfor reducing costs through the centralized services purchase"
	Santa Cruz Bank in 1998	networker	due to costs reduction, a specialized bank for different industries. Furthermore, profits	"the idea of investing in the Patagonia excited me, because I intuited its revolutionary's role in Argentina. There was a promising future over there: oil and gas industry, mining and fish industry and tourism"

	Nuevo Banco de Santa Fe in 2003, Nuevo Banco de Entre Rios, in 2005.	networker	would stay in the area and reinvested in the sector and would not be rerouted to the city.	"We began to develop the idea of organizing a regional bank so the money didn't continue flowing to Banks in the city of Buenos Aires or to the Gran Buenos Aires. These were absorbing an important percentage of the profits that were produced by the country. That is, the concept was that the capital stayed in the region where it was produced for, from there, obtaining profits for the simple fact that in the regional banks the money has no other chance than being re-invested in the area."
Decision N°4: Diversific aTion 2° stage: AGRARI AN INDUST RY	He enters in the agricultural wine production industry, Santa Sylvia and Xumek, approximately in the year 2000 in the province of San Juan.	seeker resoluted sense	He was foreseeing a strong global demand with the entrance of Asian countries.	"Argentina is a country with great possibilities because there are four riches. There are agrarian riches that are the Argentinean basis because it is a combination of capable people, that even they seem to be ignorant they assume risks, that are the true entrepreneurs, that are the agricultures, big, small, medium-sizedand that they give a mainstay to Argentinean growth, with the world's needs and more now with the inclusion of the Asian countries. The other riches are mining, energy and education."
Decision N°5: Diversific ation 3° stage: ENERGY	Entering to the energetic industry becomes the third stage of Grupo Petersen's diversification. It is a quantum leap that Enrique Eskenazi makes, the acquisition's decision, of YPF S.A shares in 2008.	risky network	Related to context, Enrique Eskenazi mentions the developed prestige by the Grupo Petersen that gave them support from swiss, northamerican, brasilian and mexican banks, that permitted Grupo Petersen	"The decision of acquiring YPF meant a great leap for our company: we joined up to one of the most important energetic companies in Latin-America. Diversifying in a key industry, with an important growth potential for the country's developmentThis activity represents a sustainability base of commodities food's industry that characterize the country"

In addition to this, in accordance to the presented information, the following figure resumes the elements that have an impact in the entrepreneurial decision model of this entrepreneur from a naturalized and dynamic perspective

The previous diagram synthesizes the principal elements that define the entrepreneurial decisions from the analyzed entrepreneur. Following the analysis's logic proposed by several authors that give an active role to the entrepreneur in the dynamic start up's process (Casson, 1993; Gartner 1989; Foss et al. 2006; Casson and Wadenson, 2007; Buenstorf, 2007 and Shane & Venkatamaran, 2000). From the entrepreneur's active role, the model indentifies as main personal traits the following: assumes risks, alertness, creative, coordinator, resolute and determined, forward looking approach, challenger, brave, persistent, networker, and strategist.

Additionally, it stresses his capability to innovate, considering that he recognizes the influence of changes in the environment. On the other hand from his actions, his abilities to evaluate and judge the market's opportunities are stressed, his capability for assigning scarce resources and his skills for entering to dynamic industries, with strategic scope and of key impact for the economic and social development of the country. The link between the actions and this entrepreneur's profile is the information availability, which is the access way to those exogenous opportunities. The network and relations developed by the entrepreneur, determined element in the entrepreneurs's decision making model, reduces the chance of committing two mistakes. On the one hand, by losing a profitable business opportunity or on the other hand, by carrying out and idea that he considers profitable presumptively and then it is not. This model considers an indispensable requirement to obtain information that allows to detect profitable business opportunity; information that maximize the entrepreneur's profits. In this case, the opportunities' structure it is not only an exogenous element, where alertness of individuals determines its exploitation, but also can create those opportunities through human actions.



# Figure 1: Entrepreneurial decision model from Austrian's perspective

Source: Author's own.

From this perspective and in concordance to what was expounded by the interviewee, the market's dynamic and opening constantly generate new business opportunities, and as Buenstorf defines (2007) "like company's development, industries evolution changes the nature of the existent opportunities and also creates new ones". In this way, exist two ways to analyze new companies' arising. The first one, with an objective character, where given the opportunities' structure, firm's start up depends on the alertness of individuals to recognize and exploit them (Casson, 2003). The other view is peculiar and dynamic, as it is defined by Buenstorf (2007), and where the evolutionary perspective allows to include in the analyzes of opportunities' nature, the endogenous changes and differences between industries and regions. So, when there are diverse paths in the markets, are these markets that mark their development and dynamic. The companies that take part in it, not only can exploit the existent but not exploited opportunities but also by creating new opportunities, according to their own experience and learning process.

# CONCLUSIONS

Throughout this paper, we have illustrated that the opportunities' recognition is a subjective process, even when its existence is an objective phenomenon that it is not perceived for all the individuals neither in any moment. The entrepreneurial opportunities cannot be exploited having as a reference the optimization action because the range of options as a result of new products' introduction is unknown, excluding the possibility of making mechanic calculation for valuing the alternatives. The entrepreneurial decisions involve the identification of means and goals previously not detected by the agents in the market. The process that links the individual with the business opportunities' capture is being analyzed in three stages: 1) Discovery's phase; 2) opportunity's running, and 3) the way to materialize it.

The discovery's phase is related with the ability of some individuals to visualize new ideas towards others that doesn't have that kind of ability. This asymmetry produces entrepreneurial opportunities and it depends on personal traits and abilities, manage of information and the implemented measures that the entrepreneur develops in a specific moment, that it is not a standardized layout in the population. It is also important to point out the value that the entrepreneur gives to that opportunity; assessment which is comprehended by its capacity of foreseeing its profits and its acceptance in the market. We believe that these entrepreneurs are essential in the business arena because they forge throughout their decisions and actions, building up plans in regions and countries simply with their own dreams, ideas and traits, that mean solid structures for future generations and most importantly, they are the driving force for up and coming entrepreneurs. This entrepreneurial style propels individuals to take risks and seek for their personal interests.

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# EQUITY ISSUES AND THE IMPACT OF LEAD MANAGER AFFILIATION ON BROKER MARKET SHARE AND TRADING VOLUME

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# ABSTRACT

Using a unique broker ID dataset, this paper investigates the trading volume and market share of brokers surrounding Seasoned Equity Offerings (SEOs) in the Australian primary market. It also uses pooled regression analysis to examine the key determinants of the behaviour of affiliated and unaffiliated brokers around SEOs. The results suggest that broker affiliation has a significant impact on broker trading volumes and market share on both the announcement days and issuance days. However, there is no significant evidence showing that lead managers or co-manager outperform other underwriters. Rather, the results indicate that co-managers are not expected to gain any abnormal volume or market share. Moreover, broker reputation, market capitalization and relative offer size of the offering firm are shown as the primary characteristics influencing broker performance.

**JEL**: G24

KEY WORDS: Seasoned Equity Offerings, Equity Issues, Broker Affiliation, Broker Market Share

# **INTRODUCTION**

Given that seasoned equity offerings (SEOs) are widely regarded as one of the most important capital structure events, a considerable amount of research has investigated capital markets around SEOs. Masulis and Korwar (1986) state two major motivations for seasonal equity offerings: first, a firm's leverage level will be reduced when the equity capital is increased; second, the raised capital is typically used to finance capital expenditures, such as purchasing assets or financing acquisitions. The purpose of a SEO could reflect the performance or health of a firm. Therefore, investors would have various expectations on the future performance of the firm. As a result, abnormal trading activity is commonly associated with SEO events. Extant literature has documented significant changes in affiliated broker market share around various financial events in capital markets, such as SEOs, Initial Public Offerings (IPOs), and changes in analyst recommendations.

Kim and Masulis (2011) observed order imbalance activities after the SEOs in Australian financial market, suggesting that the trading pattern is a result of market-making activities by underwriters. Since underwriters have a significant role in capital markets around SEOs, it is also interesting to investigate their affiliated brokers trading pattern around these offering events. The connections between the brokerage department and the corporate finance advisory department have been discussed by Ellis et al. (2000), Irvine (2001) and Niehaus and Zhang (2010). Their findings suggest that a substantial proportion of investors tend to trade with affiliated brokers after IPOs. Similarly, in SEOs, investors are also likely to trade with affiliated brokerage firms. Previous studies mainly focus on the trading patterns in the capital markets around SEOs, including order flow imbalance, analyst coverage, and short-selling behaviour. With a unique dataset with broker identification codes provided by the Australian Securities Exchange (ASX), we attempt to investigate the trading behaviour of brokers around SEO events in the Australian financial market. Moreover, we examine the abnormal patterns of trading volumes and market share for both affiliated brokers and unaffiliated brokers around SEOs.

In this paper, we employ the methodologies in Gerard and Nanda (1993) and Henry and Koski (2010) to examine the impact of SEO events and broker affiliation on the trading volume and market share of brokerage firms. We focus on changes in and the determinants of the trading volume and market share of both affiliated and unaffiliated brokers around private placements and rights offerings in the Australian equity market between 2000 and 2009. The results in this paper will provide a better understanding of affiliated brokers' and unaffiliated brokers' trading volume and market share behaviour around SEOs in primary markets. Further regression analysis will give more insights of the key determinants that may impact on broker trading behaviour and market share around equity offering events. The findings will be informative to the management of advisory firms as well as the affiliated brokerage firms in deal structuring.

The results suggest that broker affiliation has significant impacts on broker trading volume and market share around SEO announcement days and issuance days. Affiliated brokers are shown to outperform other unaffiliated brokers by 147 percent in terms of trading volume on the SEO announcement day, and this number goes up to 179 percent in the post-announcement period. Around issuance days, affiliated brokers are expected to obtain at least 151 percent more trading volume, and their abnormal volumes are expected to be 264 percent higher than those of unaffiliated brokers. However, there's no significant evidence showing that lead managers outperform other underwriters around SEO events. Co-managers are not expected to gain any abnormal volumes or market share around SEOs according to the results. Moreover, broker reputation and market capitalization of the offering firm are shown as the two major factors that influence broker performance around SEOs.

## LITERATURE REVIEW

The trading volume and market share of brokerage firms is affected by various factors. There has been a substantial amount of research investigating the link between analyst coverage and affiliated broker trading volume. Niehaus and Zhang (2010) studied the research coverage and affiliated broker market share in the US. They found that a broker's trading volume in a stock increases by 0.8 percent on average if that stock is covered by an affiliated analyst. This finding is supported by the empirical evidence in Irvine (2001) and Jackson (2005), who documented a positive relationship between analyst research coverage and broker trading volume for individual stocks on the TSE and ASX respectively. The level of analyst research coverage is considered an important factor of the quality of the underwriter's service. Francis and Philbrick (1993) argued that analysts' earnings forecasts could be influenced by analysts' recommendations as they needed to maintain their relations with the management. A firm tends to be favourable to investors when there is a high level of research coverage on the firm. Hence, it may lead to a higher level of trading volume (Krigman et al., 2001).

O'Brien and Bhushan (1990) examined the link between analyst coverage and affiliated brokers' coverage from institutional investors. They found that institutional investors' preferences and analyst coverage preferences are interactive. They suggest that analysts are likely to cover stocks with high levels of institutional ownership. On the other hand, institutional investors tend to buy stocks that are covered by analysts in the brokerage firms. From this point of view, the analyst coverage influences the trading volumes from institutional investors, while this part of volumes would also impact on the level of analyst coverage. Irvine (2001) discovered that the broker trading volume in covered stocks is 3.8 percent higher than the volume in uncovered stocks. Jackson (2005) studied the influence of analyst reputation on the trading volume of affiliated brokers. The results suggest that optimistic analysts with a good reputation tend to bring more trade for affiliated brokerage firms.

The reputation of analysts is built on their accurate forecasts. Jackson also argues that an upward bias may exist in analyst forecasts and recommendation. However, this argument has been refuted in the literature. Irvine (2004) found no evidence that analyst forecast bias would increase the level of trading volume for

brokerage firms. Ellis et al. (2000). Irvine (2001) and Niehaus and Zhang (2010) have shown interactions between the brokerage department and the corporate finance advisory department. Underwriters are likely to provide analyst research coverage for the offering firms to improve the relationships with their clients. On the other hand, investors who receive analyst coverage have the incentive to trade with the underwriter's affiliated brokers in order to build up connections for future analyst research coverage. From this perspective, the connections between broker affiliation and analyst coverage may also appear between broker affiliation and underwriters in equity offering events. Aggarwal (2000) examined abnormal trading volumes around Initial Public Offerings (IPO) in the US market. She shows that underwriters tend to manage the stabilization process in the post-IPO period, which leads to abnormal trading volumes in the market. These post-IPO activities in the US have also been studied by Ellis (2006). Ellis examined the trading volumes in the first two days following an IPO. She found that a substantial number of trades occur in the first two days after an IPO. The volume of these trades is equivalent to over 70 percent of the shares issued in the IPO. Ellis argues that the investors who cause these significant trading volumes are those who participate in IPOs and sell their allocated shares after the listing day. There are also other market participants who contribute to the abnormal volumes after IPOs. Day traders play a significant role in the market. They appear to buy and sell their positions in the first few days following IPOs in order to capture volatile price movements (Ellis, 2006, and Geczy et al., 2002).

Lead underwriters provide research recommendations for more than 80 percent of IPOs after the offer date (Bradley et al., 2003, and Cliff and Denis, 2004). Cliff and Denis (2004) discovered that IPO firms are likely to switch underwriters in Seasoned Equity Offerings (SEO) if underwriters do not provide substantial research coverage in post-IPO period. From this perspective, IPO underwriters are likely to issue analyst research coverage for their clients for future potential business opportunities. Investors who receive analyst research from the underwriting firm would have the incentive to trade with their affiliated brokerage firms (Ellis et al., 2000, and Niehaus and Zhang, 2010). Moreover, Huang and Zhang (2011) argue that investors who have connections with underwriters are more likely to participate in an SEO. Ellis et al. (2000) suggest that the lead underwriter always takes large inventory positions in the aftermarket trading, becoming the dominant market maker after IPOs. In contrast, other market makers in the market normally have inventory positions close to zero.

# DATA AND METHODOLOGY

The broker trade data is obtained from a unique Australian Securities Exchange (ASX) database. ASX is the primary stock exchange group in Australia, ranked as the eighth largest exchange in the world. The major brokerage firms in the ASX consist of global investment banks. They focus their operations on large firms and provide research analysis for institutional investors. Relatively small brokerage firms mainly focus on mid and small firms and target retail traders (Grant et al., 2010, and Jackson, 2005). There are 129 active brokers in this sample, and 26 of these brokers have been affiliated in at least one of the SEO events. Due to the availability of this unique data, the sample covers the period from January 2000 to December 2009. The sample in this paper consists of 460 private placements and 67 rights offerings. The abnormal market share for broker i on day t is computed as following (See similar approach in Irvine, 2001).

 $ABMKTSHARE_{i,t} = \frac{MKTSHARE_{i,t}}{AVEMKTSHARE_{i}} - 1$ 

Where  $MKTSHARE_{i,t}$  is the market share for broker *i* on an individual firm on day *t*,  $ABMKTSHARE_{i,t}$  is the abnormal market share for broker *i* for an individual firm on day *t*, and  $AVEMKTSHARE_i$  is the average market share for broker *i* on an individual firm over the benchmark

period. In line with Henry and Koski (2010) the benchmark period used is the 60 trading days preceding 11 days prior to the event window, excluding days on which the trading volume is zero for the firm.

The abnormal trading volume (buy + sell) for an individual firm from broker i on day t is computed as following.

$$ABVOL_{i,t} = \frac{VOL_{i,t}}{AVEVOL_i} - 1$$

Where  $ABVOL_{i,t}$  is the abnormal trading volume for an individual firm from broker *i* on day *t*,  $VOL_{i,t}$  is the total trading volume for an individual firm from broker *i* on day *t*, and  $AVEVOL_i$  is the average trading volume for an individual firm from broker *i* over the benchmark period.

Regression analyses are conducted in this paper to investigate the determinants of the trading volume patterns and market share of affiliated brokers. Following similar approaches in Grant et al. (2010) and Niehaus and Zhang (2010), the regression models that are employed in this paper are shown as following.

$$DEPENDENT_{i,t} = \beta_0 + \beta_1 AFFILIATION_{i,t} + \beta_2 \ln(BROKERSIZE_{i,t}) + \beta_3 \ln(MKTCAP_t) + \beta_4 STD_t + \beta_5 RELSIZE_t + \beta_6 CLOSEOFFER_t + \varepsilon_{i,t}$$

Where  $BROKERSIZE_{i,t}$  refers to the total market share of broker *i* on day *t* across all stocks.  $MKTCAP_t$  is the market capitalization of the offering firm on the trading day prior to the issuance day *t*. Since Broker Size and Market Capitalization are not normally distributed, the logarithm forms of these two variables are used in the regression model (See similar approaches in Henry and Koski, 2010).  $STD_t$ Returns refers to the standard deviation of daily returns over the 30 trading days prior to the offering.  $RELSIZE_t$  is the relative offer size of the offering firm on day *t*.  $CLOSEOFFER_t$  refers to the closeto-offer return of the offering firm on issuance day *t*. In Regression 1,  $AFFILIATION_{i,t}$  is a dummy variable equal to one if broker *i* is affiliated in a SEO on day *t*, and zero otherwise. Regression 1 will be estimated against various dependent variables,  $DEPENDENT_{i,t}$ . These dependent variables consist of the abnormal market share, the raw market share, the abnormal volume, and the abnormal market.

## **RESULTS AND DISCUSSION**

Daily average abnormal buy and sell volumes for both affiliated and unaffiliated brokers around the announcement date are presented in Figure 1. The graphs in the four panels present similar pre-event patterns: abnormal volumes remain flat and close to zero over the 20-day period prior to the announcement. In Panel A and Panel B, the pre-event activities are quite different from those in Figure 1, where significant abnormal volumes from affiliated brokers can be observed before the issuance day. In contrast, as shown in Figure 1, affiliated brokers do not attain abnormal buy or sell volume until SEOs are announced to the public. Figure 2 presents the average daily trading volume and market share for both affiliated brokers around issuance days and announcements. The bar charts represent broker trading volume, and the line graph indicates broker market share.

Panel A and Panel B present these measures for affiliated brokers. The peak level of volume is observed four days prior the issuance indicating that daily turnover exceeds two million shares. This figure drops

slightly in the following days but still remains at around one million shares until two days after the issue. Average trading volume then tends to revert back to normal levels. Surprisingly, a small upward trend is evident in the final five days of the 20-day event window. This likely represents an empirical abnormality. Broker market share follows similar patterns as the trading volume. It fluctuates around seven percent at the beginning of the event window period. Broker market share then begins to increase markedly five days prior to the issuance day, and it reaches the maximum one day after the issuance day. Over the following days, market share then drops back and remains at around eight percent from the eighth day after issuance. In contrast, different patterns in affiliated broker trading volume and market share around announcements are observed in Panel B. The pre-event period is relatively quiet and flat, which is consistent with the findings in Figure 2. Broker trading volume then rises rapidly from 200,000 shares to 1.6 million shares on the announcement.

This number remains at this high level in the first two days after the announcement, and then starts to decline. Broker market share reflects movements in trading volume. The market share stays relatively stable at around six percent at the beginning of the period. Surprisingly, affiliated brokers then lose some of their market share in the last two days prior to the announcement. However, their market share subsequently increases when the SEOs are announced to the market. Also, although the trading volume of affiliated brokers decreases after the announcement, their market share remains strong in the post-event period, exceeding eight percent on average. This can be attributed to the temporary spikes and greater fluctuations in market share around issuance days. Trading Activities around SEOs

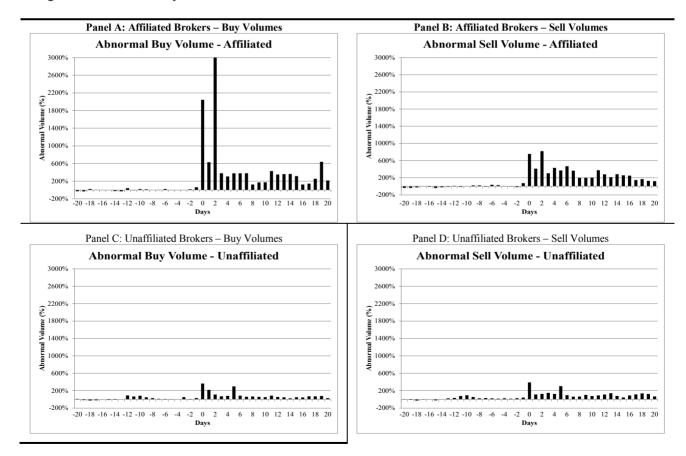
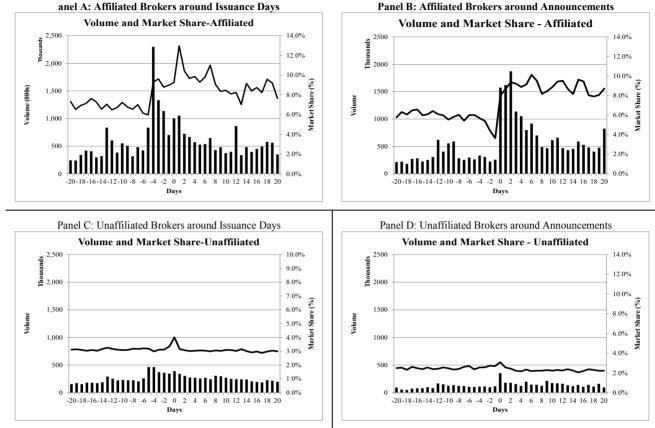


Figure 1: Abnormal Buy and Sell Volumes around Announcements

Figure 2: Broker Market Share and Volume



The average daily trading volume and market share of brokers around SEO announcement days are shown in Table 2. Panel A contains trading activities around announcements for affiliated brokers. The daily average volume measures remain relatively stable prior to the announcement day. These measures then reach their peak value on the announcement day. Following this, the numbers decrease significantly five days after the announcement. This pattern is also reflected in the market share variable and relative volume measures. Affiliated broker market shares are higher than those of unaffiliated brokers over the entire event window period. However, the daily abnormal market share of affiliated brokers in the pre-event period is negative. Panel A does not show significantly positive abnormal volumes for affiliated brokers brokers prior to the announcements.

These measures increase rapidly on the announcement days. The abnormal volume and the abnormal sell volume each increase to over 700 percent after the announcement. Moreover, the abnormal buy volume reaches 2045 percent when SEOs are announced in the market. These abnormal measures remain strong in the 5-day period after the announcement and then progressively decrease during the rest of the post-event period. In Panel B, the raw volume measures, market share and relative volume measures for unaffiliated brokers present a symmetric pattern. Consistent with previous results, peak levels appear on the announcement days, and are much lower in magnitude than those of affiliated brokers. On the announcement day, daily average total volume of unaffiliated brokers is 353,933 shares, while affiliated brokers' daily total volume exceeds 1.5 million shares.

This contends that investors are likely to submit their orders to affiliated brokers when SEOs are announced in the market. However, there is not much difference in the relative volume measures between affiliated brokers and unaffiliated brokers, indicating that both tend to trade more on the SEO stock around the announcement. Significant positive abnormal volume measures for unaffiliated brokers are observed on the announcement day. They are expected to receive over 300 percent more volume compared to their average level. In the first ten days of the event window period, the abnormal trading volumes of unaffiliated brokers are not significantly different from zero, indicating that their order flow is close to normal levels during this period. In contrast, the abnormal market share of unaffiliated brokers remains significantly negative over the entire event window period, reflecting the tendency for affiliated brokers to realize a substantial market share from unaffiliated brokers around SEO announcements.

Table 2: Broker Trading Activity around SEO Announcements

Panel A: Affiliated Brok	ker Volume Stati	istics around SE(	O Announceme	nts			
	(-20)-(-11)	(-10)-(-6)	(-5)-(-1)	Day(0)	(1)-(5)	(6)-(10)	(11)-(20)
Total Volume	299113	396806	277757	1574421	1296334	637980	534476
Buy Volume	149671	205800	131091	888491	650925	295126	253398
Sell Volume	149442	191006	146667	685931	645409	342855	281077
Market Share	6.18%	5.77%	5.03%	8.01%	9.06%	9.03%	8.75%
<b>Relative Buy Volume</b>	0.32%	0.38%	0.31%	1.84%	1.17%	0.64%	0.65%
Relative Sell Volume	0.29%	0.36%	0.29%	1.45%	1.17%	0.77%	0.66%
Relative Volume	0.31%	0.37%	0.30%	1.65%	1.16%	0.71%	0.65%
Abnormal Volume	-20.25%***	3.36%	3.97%	913.49%***	559.54%***	245.44%***	220.70%***
Abnormal Market Share	-31.61%***	-31.40%***	- 38.67%***	2.87%**	32.39%***	22.26%***	8.84%*
Abnormal Buy Volume	-6.76%**	12.22%***	14.92%***	2044.63%***	1976.01%***	245.76%***	321.21%***
Abnormal Sell Volume	-19.87%***	14.73%***	14.56%***	753.72%***	466.86%***	285.53%***	222.62%***

This table summarizes broker trading volumes and market shares around 527 SEO announcements in the sample from January 2000 to December 2009. The event window is from 20 days prior to the SEO announcement (-20) to 20 days after the announcement (20). Day(0) refers to the announcement day. The asterisks refer to the level of significance for a t-test that the mean value is equal to zero. \*\*\*, \*\*, \* denote statistical significance at the 1%, 5%, and 10% levels respectively for the abnormal measures.

	(-20)-(-11)	(-10)-(-6)	(-5)-(-1)	Day(0)	(1)-(5)	(6)-(10)	(11)-(20)
Total Volume	94510	123640	109056	353933	168383	161606	135600
Buy Volume	47600	65184	54422	178342	84250	81966	68646
Sell Volume	46910	58456	54634	175591	84132	79640	66955
Market Share	2.48%	2.51%	2.59%	3.09%	2.35%	2.24%	2.26%
Relative Buy Volume	0.31%	0.43%	0.40%	1.09%	0.48%	0.40%	0.30%
Relative Sell Volume	0.29%	0.37%	0.33%	1.18%	0.44%	0.40%	0.31%
Relative Volume	0.30%	0.40%	0.37%	1.17%	0.45%	0.40%	0.31%
Abnormal Volume	-1.98%	20.53%**	0.68%	314.05%***	123.54%***	45.65%***	48.83%**
Abnormal Market Share	-41.42%***	-40.33%***	-38.45%***	-18.22%***	-40.67%***	-41.64%***	-44.46%**
Abnormal Buy Volume	8.10%	36.96%***	19.99%***	363.27%***	156.15%***	64.98%***	56.48%**
Abnormal Sell Volume	7.58%	45.99%***	24.86%***	390.22%***	164.12%***	81.18%***	100.85%**

Determinants of Trading Volumes and Brokers' Market Shares Table 3 provides the results from the OLS regression analyses relating to the determinants of broker trading volume and market share around SEO announcements. The affiliation dummy variable is significant at the one percent level in the first three equations. The coefficient of the affiliation dummy variable indicates that affiliated broker volumes are expected to be significantly higher than those of unaffiliated brokers in pre- and post-announcement period and on the announcement day. Affiliated brokers receive 147 percent more volume than other brokers on average on the announcement days. This percentage increases to 179 percent even in the post-announcement period. However, affiliated brokers are expected to be the large brokerage firms in the market. For this reason, their volumes are higher than those from other brokerage firms. Both the broker size and the market capitalization are found to be correlated with broker trading activities around SEOs. The broker size has a positive impact on brokers trading volumes and market share, indicating that large brokers are likely to take away a substantial market share from smaller brokers. Furthermore, abnormal trading volumes and abnormal market shares are also positively correlated with broker size. This suggests

that the percentage changes in broker market share around SEOs are greater for larger brokerage firms. In comparison, market capitalization is negatively associated with broker trading activities.

Dependent Variable	Ln (Volume)			Abnormal Volume			
Period	(-5)-(-1)	(0)	(1)-(5)	(-5)-(-1)	(0)	(1)-(5)	
Intercept	10.367	Ì 3.889	ìź.130	-2.264	8.773	2.093	
1	(0.489)***	(0.478)***	(0.475)***	(0.585)***	(5.521)	(5.157)	
Affiliation	1.137	1.472	1.789	0.059	10.498	3.270	
	(0.116)***	(0.117)***	(0.112)***	(0.159)	(1.500)***	(1.401)**	
Ln(Broker Size)	Ò.491	Ò.411	Ò.517	Ò.141	Ò.798 ´	Ò.790 ´	
	(0.027)***	(0.026)***	(0.027)***	(0.032)***	(0.305)***	(0.285)***	
Ln(Market Cap)	0.057	-0.086	-0.004	0.142	-0.090	0.104	
(	(0.024)**	(0.023)***	(0.023)	$(0.028)^{***}$	(0.269)	(0.251)	
Std Dev	-0.301	-0.391	-0.402	-0.169	-0.801	-0.314	
	(0.038)***	(0.038)***	(0.038)***	(0.046)***	(0.437)*	(0.408)	
Relative Offer Size	0.223	0.002	0.784	0.080	-2.145	2.651	
	(0.240)	(0.237)	(0.229)***	(0.293)	(2.764)	(2.581)	
Close-to-Offer	-0.438	-0.563	-0.346	-0.323	-1.161	-0.412	
	(0.225)*	(0.228)**	(0.227)	(0.277)	(2.615)	(2.442)	
R-Square	0.162	0.172	0.238	0.014	0.02	0.005	
it Square	Broker Market Share			Abnormal Market Share			
	(-5)-(-1)	(0)	(1)-(5)	(-5)-(-1)	(0)	(1)-(5)	
Intercept	0.145	Ò.183	0.145	-1.691	-1.850	-1.429	
1	(0.011)***	(0.020)***	(0.012)***	(0.188)***	(0.421)***	(0.298)***	
Affiliation	0.034 <sup>′</sup>	Ò.119	Ò.083	-0.023	Ò.684	Ò.646	
	(0.003)***	(0.005)***	(0.003)***	(0.051)	(0.114)***	(0.081)***	
Ln(Broker Size)	0.013	0.013	0.013	0.111	0.078	0.121	
· · · · ·	(0.001)***	(0.001)***	(0.001)***	(0.010)***	(0.023)***	(0.016)***	
Ln(Market Cap)	-0.003	-0.005	-0.003	Ò.088	Ò.103	Ò.076	
(	(0.001)***	(0.001)***	(0.001)***	(0.009)***	(0.021)***	(0.015)***	
Std Dev	-0.001	-0.001	Ò.001	0.022 <sup>´</sup>	-0.004	Ò.152	
	(0.001)	(0.002)	(0.001)	(0.015)	(0.033)	(0.024)***	
Relative Offer Size	0.005	-0.005	0.004	-0.159	-0.351	-0.400	
	(0.006)	(0.010)	(0.006)	(0.094)*	(0.211)*	(0.149)***	
Close-to-Offer	-0.003	-0.004	0.003	-0.044	0.103	-0.074	
	(0.005)	(0.010)	(0.006)	(0.089)	(0.199)	(0.141)	
R-Square	0.185	0.198	0.283	0.056	0.024	0.064	

Table 3: Determinants of Broker Trading Volume and Market Share around Announcement
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This table summarizes the results of the regression analysis on determinants of brokers' trading volumes and market shares around SEO announcements. Ln(Volume), Abnormal Volume, Broker Market Share and Abnormal Market Share are regressed against six dependent variables. (-5)-(-1) refers to the period from five days prior to the event to one day prior to the event. Day(0) refers to the announcement day. (1)-(5) refers to the period from one day after the event to five days after the event. Standard errors are listed in parentheses. \*\*\*, \*\*, \* denote the statistical significance at the 1%, 5%, and 10% levels respectively.

Brokers are expected to obtain higher trading volumes and market shares in relatively small firms around SEOs.

When broker abnormal volumes are regressed against the six explanatory variables listed, the affiliation variable is only statistically significant in the post-announcement period and on the announcement day. When the SEO is announced in the market, the amount of additional volume that affiliated brokers receive is expected to be 10 times higher than those of unaffiliated brokers. The results also demonstrate that brokerage firms are expected to receive additional volume around SEO announcements if they are affiliated with the underwriter. The coefficients of the broker size variable are all positive, and statistically significant at the one percent level, suggesting that brokers with better reputations tend to obtain abnormal volumes. The market capitalization of the offering firm has a substantial influence on daily trading volumes only during the pre-announcement period and on the announcement day, but it is unlikely to influence broker abnormal trading volumes. The signs of the market capitalization variable are not consistent in different time periods. In the pre-announcement period, an SEO firm with a larger market capitalization provides higher trading volumes for brokers on average. However, on the announcement day, the market capitalization is shown to be negatively related to broker trading volume. Relative offer size is found to significantly impact broker trading volume only in the post-announcement period. It is unlikely to be an important factor of broker abnormal trading volume. Surprisingly, close-tooffer return is not a significant determinant, indicating that the level of underpricing is unlikely to affect

the broker trading volume around the SEO announcement, which is inconsistent with findings in Henry and Koski (2010).

Affiliation is a significant determinant of broker daily market share and abnormal market share in most of the pre- and post-announcement periods and on the announcement day. In the pre-announcement period, the abnormal market share of brokers is unlikely to be influenced by broker affiliation. This is reflected in Figure 1 and Table 3, in which the pre-announcement period appears to be relatively flat. Following the announcement, broker affiliation then becomes a significant determinant. The results indicate that a brokerage firm abnormal market share is expected to be 68 percent higher than those of unaffiliated brokers. This effect persists into the post-announcement period as well. Broker size and market capitalization are also found to be significant determinants of a broker's daily market share. All coefficients of broker size are positive, which suggests that the level of a broker's reputation has a direct relationship with their market share. Interestingly, the market capitalization of SEO firms appears to be negatively related to the daily market share of a broker. In contrast, market capitalization is expected to have significant positive impacts on broker abnormal market share. Consistent with trading volume and abnormal volume, there is no evidence showing that relative offer size and level of underpricing would determine the levels of brokers' market shares and abnormal market shares.

## **CONCLUDING COMMENTS**

This paper investigates broker trading volume and market share behaviour around SEO events in the Australian primary market based on a unique broker ID dataset. Pooled regressions were conducted to examine the key determinants that influence affiliated and unaffiliated broker behaviour, including stock characteristics, index movements, and broker characteristics. The findings provide insights into the key determinants that may impact on broker trading behaviour and market share around equity offering events. Using the evidence from the Australian market, this paper suggests that broker affiliation has a significant impact on broker trading volume and market share around both SEO announcement days and issuance days. Affiliated brokers are shown to outperform unaffiliated brokers by 147 percent in terms of trading volume on the SEO announcement day, and this number goes up to 179 percent in the post-announcement period. Around SEO issuance days, affiliated brokers are expected to obtain at least 151 percent more trading volume, and their abnormal volume is expected to be 264 percent higher than those of unaffiliated brokers. The results indicate that brokers are able to improve their turnover and performance by participating in SEOs.

Using a pooled regression model, this paper identifies the key determinants of broker trading activities around SEOs. The results show that broker size and the market capitalization of the issuing firm are two primary characteristics affecting broker performances around SEOs. Large brokers are expected to outperform other brokers in terms of trading volume and market share (both for raw and abnormal measures). It also shows that brokers are expected to obtain a greater abnormal market share in large firms. However, broker trading volume is shown to be negatively associated with the market capitalization during announcements. This indicates that brokerage firms that underwrite large firms tend to attain greater trading volumes to obtain higher market shares.

On the other hand, SEOs of relatively small firms tend to be attractive to smaller brokerage firms, as they are able to obtain significant abnormal trading volume, indicating that they substantially outperform in the market compared to their average turnovers. Relative offer size appears to significantly impact broker trading volume in the post-announcement period, but their trading activities are unlikely to be affected by stock volatility and the level of underpricing of SEOs. Furthermore, the purpose of the offering is found to be a significant determinant. SEOs with a purpose of growth and expansion are expected to bring greater trading volume to brokers. These findings are also informative to the management of advisory firms as well as the affiliated brokerage firms. It implies that market capitalization, relative offer size, and

purpose of offering are important factors that they should consider in searching and constructing deals. During SEOs, the underwriter could be different from the IPO underwriter of the issuing firm. Firms may switch underwriters due to post-IPO performance, analyst coverage, or change of the firm size. In future research, it would be interesting to examine the factors that influence a firm's decision on the choice of underwriters after IPOs. These factors could be an important source of an underwriter's competitive advantage.

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# ENHANCING CUSTOMER SATISFACTION BY INCREASING THE FREQUENCY OF USE OF AGRICULTURAL BUSINESS UNITS

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## ABSTRACT

Customers are the life-blood of any business and happy customers lead to customer loyalty and ultimately repurchase behavior. It is therefore essential to ensure that the customers of a business, remains satisfied. Business units, such as retail shops, grain marketing and financing within an agricultural business provide a unique opportunity to test customer satisfaction, as the customers making use of the various business units are relatively homogeneous. The purpose of this paper is to determine whether the frequency with which business units are used is related to customer satisfaction of the particular business units. Furthermore, the relation between how frequent business units are used and the overall customer satisfaction (performance) of the company as a whole are also determined. The results indicate that the more frequent business units are used, the higher would be the opinion of the customers of the particular business unit (except in the case of retail shops). It was also found that the customers using particular business units often rather than seldom would rate the performance of the organization higher. The paper thus indicates that it is imperative to increase the frequency with which customers use business units.

## **INTRODUCTION**

One of the major concerns in any organization is the necessity for customer satisfaction that leads to loyalty, as acquiring new customers cost more than retaining current customers. Since organizations depend on repeat business for survival, profits increase if customers are efficiently served (Nowak and Washburn, 1998). Therefore, customer satisfaction is the number one antecedent to retaining customers (Bodet, 2008). This is a well-known research area that has receives a great deal of attention (Keiningham, Perkins-Munn, Aksoy and Estrin, 2005; Martin-Consuegra, Molina and Esteban, 2007; Oliver, 2009; Prabhakar, 2007; Singh and Sirdeshmukh, 2000; Stock, 2005; Sun, Wilcox and Zhu, 2007 and Yu, 2007).

Customer relationship management is directly related to satisfying customers' needs. Through the process of customer relationship management, the expectations of customers can be reached due to the manner in which the product and/or service are presented to the customer (Hardeep and Amandeep, 2011). The benefits that customer relationship management bring forth are the critical factors namely customer satisfaction and loyalty (Krasnikov, Jayachandran and Kumar, 2009).

Customer satisfaction and loyalty are antecedents for the survival of any business; the reason being that higher levels of customer satisfaction should lead to higher levels of loyalty which would increase cash flow, an increased market value of the business and therefore higher levels of profitability (Luo and Bhattacharya, 2006). Satisfied customers are loyal customers and these customers will buy more of the products and services offered by the business and are less sensitive to prices. Loyal customers also account for the majority of the profits of a business. (Kotler, 2000:48). Relationship marketing thus leads to a stronger commitment and loyalty from the customer that would be more difficult for competitors to top (Batt & Rexha, 2000). Customer satisfaction is, therefore, a vital component in obtaining customer loyalty, which is required to ensure repeat purchases from customers (Zhao, Lu, Zhang and Chau, 2012). Cooperatives were established on the basis that they would provide the greatest benefit to the producers/owners. However, with the conversion of these agricultural cooperatives to IOF's, the focus is primarily on profit and share price maximization (Harvey and Sykuta, 2006).

According to Olson and Boehlje (2010) rivalry among agribusinesses is one of the fundamental factors affecting the survival of these firms. Also, it has been established that agribusiness firms would only be able to obtain customers from competitors and retain existing customers by competing on price and non-price factors, i.e. keeping customers satisfied. Customer relationship management therefore becomes an integral part in the organization in ensuring that customers are satisfied and loyal towards the organization (Liou, 2008). Agricultural businesses serve commercial farmers as suppliers of inputs, as marketing agents of their commodities and as service providers (Ortmann and King, 2007). Thus, the agricultural business acts as a supplier to its customers from the input side of the value-chain, as well as the marketing and the selling of commodities from the output side of the value-chain, while also providing various services such as financing and insurance. Most typical agricultural businesses as a result consist of various business units that are operated for the benefit of their customers.

Business units, such as retail shops, grain marketing and financing within an agricultural business provide a unique opportunity to test customer satisfaction, as the customers making use of the various business units are relatively homogeneous. Also, the customers making use of the business units are business owners themselves (farmers), with the effect that this analysis becomes a business-to-business research study. Therefore, each business unit will be regarded as a business in its own right, under the 'umbrella' of the agricultural business. The purpose of this paper is to determine whether the frequency with which business units are used is related to customer satisfaction of the particular business units. Furthermore, the relation between how frequent business units are used and the overall customer satisfaction (performance) of the company as a whole are also determined. The paper is structured as follows: relevant literature on customer satisfaction, customer loyalty, as well as repurchase intentions of customers is considered. The research method will be discussed and finally the results will be presented with accompanying recommendations and concluding remarks will be provided.

## LITERATURE REVIEW

The literature review will examine the relationship between customer satisfaction customer loyalty, as well as the connection between customer satisfaction and repurchase intention.

#### Customer Satisfaction And Customer Loyalty

The majority of businesses are concerned with satisfying both themselves and their customers. Customers are satisfied when they receive good quality products and services at fair prices, while the business would be satisfied if it is profitable (Helgesen, 2006). By retaining customers and increasing customer loyalty, customers continue making use of the products and/or services of the organization and ultimately the organizational profitability should increase (Helgesen, 2008). Customer satisfaction should lead to several advantages to a business, such as increased loyalty, price inelasticity, retaining current customers by cutting them off from competitive efforts, reduced future transactions and failure costs, the enhancement of the business's reputation and a decrease in the cost of appealing to new customers (Fornell, Mithas, Morgesson & Krishnan, 2006:4). Loyalty can be described as the willingness of the average customer to repurchase the product/service as a result of psychological attachment and to maintain a relationship with the service provider/supplier (Rauyruen and Miller, 2007).

According to Fornell, *et al* (2006), the more loyal a customer is to a particular business, the longer the customer would frequent the business and consequently the revenue would increase due to the constant support of the customer. It has been suggested in various studies that the longer a customer stays with a particular business, the more loyal that customer is and the more profitable the customer becomes to the business, as future cash flows are secured (Ranaweera, 2007).

There are several ways in which customer retention could lead to increased profits. Firstly, by retaining customers a company could show a reduction in costs, as it has been established that it costs more to acquire new customers than to retain existing ones. Secondly, an increased volume of purchases is likely if the customer is satisfied with the specific business, product and or services provided. Thirdly, the business could charge premium prices if customers are loyal to the business and lastly, the retained customers could engage in increased word-of-mouth marketing (Zeithaml 2000).

## Customer Satisfaction And Repurchase Intention

According to Gustafsson, Johnson & Roos (2005) the two primary reasons why individuals repeat purchases at a specific business are a lack of available alternatives (be it real or perceived by the customer) and customer satisfaction. Due to intense competition in the marketplace, customer lovalty has become a major theme in marketing research. It has been referred to as the ultimate objective of customer satisfaction (Deng, Lu, Wei & Zhang, 2010). Customer loyalty can be defined as "a deeply held commitment to re-buy or repatronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior" (Arnould, Price & Zinkhan, 2004). It has been found that perceived price fairness, perceived product quality, trust, as well as customer satisfaction all play a major role in forming customer loyalty (Yieh, Chiao & Chiu, 2007). Perceived price fairness and product quality are drivers of customer satisfaction, which in turn could lead to customer loyalty. If a customer buys a product or service more than once from a business, the customer is more likely to form an opinion or attitude about the business, which can be positive or negative. This attitude then forms the basis of the customer's expectation with the next encounter with the business (Oliver, 2009). Transaction-specific satisfaction has a direct impact on overall satisfaction and that both transaction-specific satisfaction and overall satisfaction will impact whether a customer has the intention to remain a customer of the particular business.

Very importantly, however, overall satisfaction acts as a moderator between transaction-specific satisfaction and repurchases intention. Previous studies (Parasuraman, Zeithaml and Berry, 1994 and Anderson, Fornel and Lehmann, 1994) worked on the premise that transaction-specific satisfaction leads to overall satisfaction, which leads to repurchase intention. Also, it was found that even though customers might experience a service failure occasionally, they will still continue to have a high repurchase intention. The model explains this phenomenon on the basis that overall satisfaction intercedes in the event of a transaction-specific dissatisfaction (or service failure) and the customer is retained due to their overall satisfaction as a result of previous experiences. This model thus indicates that overall satisfaction is a better indicator of satisfaction than transaction-specific satisfaction, as it has a stronger influence on repurchases intention (Jones & Suh, 2000). The specific hypothesis was also tested by Zhao, et al (2012) and again, overall satisfaction contributed significantly more to repurchase intensions than transactionspecific satisfaction, although both are statistically significant. With regard to agricultural businesses, where the customers make use of the agricultural business over long periods of time, their overall customer satisfaction plays an important role as previous experiences with the organization will provide a basis for their satisfaction. A loyal customer would have the intention of making use of the business again (Zhao, et al, 2012). The two concepts 'repurchase intentions' and 'loyalty' are therefore, closely related.

## METHODOLOGY

The research technique employed in this study is of a quantitative nature, making use of questionnaires to ascertain the data required. The target population comprised all active customers of a major agricultural business in Central South Africa that provide US\$ 12 166 (R100 000) or more volume of business to the agricultural business. In order to make provision for non-response, it was decided to use the whole population. This decision eliminated the use of a population sample and is therefore considered to be a census. Given that all individuals in the population had a non-zero probability of selection, each member

of the population had an equal probability of being selected. The reason the census method being used was due to the fact that the agricultural business consists of various business units with customers making use of the business unit to varying degrees. In addition, when populations are relatively small and easily accessible, accuracy will be increased by using a census rather than sampling (Cooper and Schindler, 2006). The customers making use of the business units are also businesses (farms), therefore this could be regarded as a business-to-business research study (Brennan, Canning and McDowell, 2011).

The research instrument used in this study was a questionnaire. The questionnaire made use of closedended and Likert scale questions and aimed to determine which of the various business units have the biggest impact on customer satisfaction with the overall company and whether the frequency of the use of the different business units affect the overall satisfaction of the customers towards the agricultural business. Since only one agricultural business was examined, there might be uncertainty as to whether this study should not be classified as a case study. The reason why this particular study is not regarded as a case study can be attributed to the fact that the business units that form part of the larger agricultural business ("umbrella" organization) is managed and organized as smaller businesses themselves. Also, the customers of the various business units are businesses themselves. The total response was 345 customers (businesses/farms), which make use of 11 various business units. This study can therefore be regarded as a business-to-business research study. A total of 963 questionnaires were sent out to respondents and 345 usable questionnaires were sent back. The response rate was therefore 35.8% of the total population.

## RESULTS

The following section provides the data relevant to this study, namely the demographics of the respondents and then the empirical results that aim to establish the link between customer satisfaction and the frequency with which business units in an agricultural business are used.

## **Demographics**

The target population comprised all active customers of a major agricultural business in Central South Africa that provide US\$ 12 166 (R100 000) or more volume of business to the agricultural business during 2009. In order to make provision for non-response, it was decided to use the whole population. This decision eliminated the use of a population sample and is therefore considered to be a census. When populations are relatively small and easily accessible, accuracy will be increased by using a census rather than sampling (Cooper and Schindler 2006). The total response was 345 customers (farms) out of a total of 963 questionnaires sent out, making the response rate 35.8%. Respondents were asked to indicate which type of farming operation they have, the years' farming experience they have, as well as their age. The demographics results also indicate the relative size of the respondents' businesses.

Table 1: Business (farm) type

Business (farm) type	Frequency	Percentage
Mainly grain	154	45.0%
Mainly live stock	106	31.0%
Proportional (Approximately 50% grain and 50% live stock)	82	24.0%
Total	342*	100%

This table shows the different types of farming operations the respondents have. The main groups were mainly grain farmers, mainly live stock farmers, as well as a 50% grain, 50% live stock farm. \*Three respondents did not answer this specific question

Table 1 clearly indicates that a larger percentage of the overall population is mainly grain farmers, while 14% less have mainly live stock farms. The proportional farms (equally divided between grain and live stock) are 24%. The results also indicated that the majority of the respondents have more than 41 years' experience and less than 2.6% has less than 5 years' experience. It was found that the average years'

experience is 29.4 years, which suggest that the respondents have adequate knowledge with regard to agricultural businesses. The average age of the respondents was established to be 53.6, while less than 2% of the respondents were 30 and younger.

Table 2: Size of the business

Size of the business	Frequency	Percentage	
Small	134	38.8%	
Medium	115	33.3%	
Big	96	27.8%	
Big Total	345	100%	

This table provide information with regard to different size customers, be it small, medium or big customers (from the viewpoint of the agricultural business).

The respondents were also classified according to the size of their contributions to the agricultural business into small customers (between US\$ 12 166 [R100 000] and US\$ 30 414 [R250 000] volume of business), medium customers (between US\$ 30 414 [R250 001] and US\$ 79 075 [R650 000] volume of business) and big customers (more than US\$ 79075 [R650 001] volume of business). The three groups were roughly equally distributed with small customers being the biggest group (38.8%), while 33.3% were medium customers' respondents and 27.8% small customers' respondents. The following subsection will present the empirical data obtained from the respondents.

### Empirical Data

A Likert scale question was provided to the respondents where they had to indicate the frequency with which they use the various agricultural business units available to them.

Business units	Often	Seldom	Never	% of total that use	Rank
Retail shops	91.6%	7.0%	1.4%	98.6%	1
Grain storage	51.5%	22.7%	25.9%	74.2%	3
Grain marketing	29.7%	23.6%	46.6%	53.3%	5
Financing	26.0%	20.5%	53.5%	46.5%	7
Mechanization (workshops)	17.0%	31.3%	51.7%	48.3%	6
Mechanization (spare parts)	55.7%	33.5%	10.8%	89.2%	2
Mechanization (whole goods)	17.0%	38.4%	44.6%	55.4%	4
Insurance	20.4%	15.6%	64.1%	36.0%	8

Table 3: Frequency of use of business units

Respondents had to indicate if they use each particular business unit often, seldom or never. The fifth column indicates the percentage of respondents of the total number of respondents (345 respondents) that use that particular business unit, it being often or seldom, while the last column indicates which of the business units are used most, according to a ranking system.

It is important to note that the main agricultural business units for this specific agricultural business (and the majority of agricultural businesses in South Africa) are *retail shops*, *grain storage* and *marketing*, *financing*, *mechanization* (*workshops*, *spare parts* and *whole goods*) and *insurance*. Table 3 indicates that the unit used most by respondents is *retail shops*. Almost 99% of the respondents make use of it, while approximately 92% of the respondents use this business unit often. More than 89% of the respondents make use of *grain storage*. This is to be expected as the majority of respondents are grain farmers. Business units that are used less often are *grain marketing*, *financing*, *mechanization* (*workshops*), *mechanization* (*farm equipment*) and *insurance*. The table also indicates that more than 50% of respondents do not make use of the following main agricultural services, such as *financing*, *mechanization* (*workshops*) and *insurance*. The first step in determining if the frequency of use of the various business units affects the satisfaction of customers towards the overall agricultural business, is to determine if there is a statistically significant relationship between the frequency with which a specific business unit is used and the overall

*performance* of that specific business unit. Therefore the Levine's test for equality of variances was used to determine which t-test to use to determine the p-value (significance) of each specific relationship.

In Table 4 the p-value column indicates that all of the t-tests were found to be statistically significant, apart from that of *retail shops*. The mean value indicates whether the respondents perceived the *performance* to be better or worse between the group that use the business unit often and the group that use it seldom.

Table 4: T-test between the overall performance per business unit with the frequency with which each business unit is used

	Ν	Mean	Std.Dev		T-test for equality of	of means
				t	df	Sig
			Retail shop	S		
Often	313	6.7827	1.52461			
Seldom	23	6.0870	2.06514	1.584	23.795	0.126
			Grain stora	ge		
Often	176	7.5511	1.29071	8		
Seldom	73	6.9452	1.41314	3.279	247	0.001
			Grain marke	ting		
Often	101	7.2574	1.44674	0		
Seldom	69	6.1449	1.75126	4.516	168	0.000
			Financing			
Often	83	7.5181	1.36472			
Seldom	54	6.4630	1.55057	4.189	135	0.000
			Mechanization (wo	rkshops)		
Often	54	6.5370	1.71247	• /		
Seldom	91	5.9231	1.64810	2.137	143	0.034
			Mechanization (spa	are parts)		
Often	183	6.2678	1.83955	<b>-</b> ′		
Seldom	103	5.4660	2.09020	3.367	284	0.001
			Mechanization (wh	ole goods)		
Often	52	7.2500	1.65535	<u> </u>		
Seldom	108	6.0648	1.65350	4.245	158	0.000
			Insurance	1		
Often	67	7.6418	1.05459			
Seldom	40	6.4500	1.44914	4.534	63.793	0.000

This table provides the number of respondents that indicated their frequency of use (N), the mean value of their relative perception of performance (Mean), as well as the standard deviation (Std.Dev). The t-value for the test is also supplied, as well as the degrees of freedom (df), and most importantly the p-value (Sig) that indicates the statistical significance of the relationship.

The results indicate that there is a definite statistically significant relationship between the frequencies with which customers use the various business units, except in the case of *retail shops* (p > 0.05). Interestingly, all of the means indicate (excluding *retail shops*) that those individuals using the business units often are more satisfied with the business unit being used, compared to those individuals using the business unit seldom. Respondents that make use of *grain storage* more often, have a higher opinion of the *performance* of this specific business unit. The same is true for all of the other business units. *Retail shops* also shows an indication that the respondents that use the business unit more often have a more positive view than those that use it less regularly, although this is the only difference that is not significant. Table 4 thus provide an indication that farmers that use the business units more often will have a more positive attitude towards the performance of the business units.

The results from Table 5 indicated that the *performance* of every business unit correlated positively (and significantly) with the *performance* of the overall company. It can therefore be said that an improvement in the satisfaction of customers of any business unit will (to a greater or lesser extent) also improve the overall satisfaction towards the company. The coefficient of determination (R<sup>2</sup>) measures the strength of the correlation and the percentage indicates the change in the satisfaction of the overall company that can be accounted for by a change in the *performance* of the specific business unit. It is therefore clear that a change in the satisfaction towards of *retail shops* will have the biggest impact on the overall company or

to put it differently, when there is a change in the overall level of satisfaction towards the company, 32% of that change will be explained by a change in the level of satisfaction towards *retail shops*. All three *mechanization* business units (with a R<sup>2</sup> of 20%) are second and *insurance* third most influential. It can therefore be deduced that the more often business units are used within an agricultural business, the higher the perception of *performance* will be with regards to the agricultural business as a whole. The next step would be to determine which of the business units' frequency has the biggest influence on the overall satisfaction towards the agricultural business as a whole.

Table 5: Correlation between the overall performance of each business unit with the performance of the company as a whole

Overall perception	Ove	erall performance of compan	ıy
	Sig	R <sup>2</sup>	Rank
Retail shops	0.000	32%	1
Grain storage	0.000	7%	6
Grain marketing	0.000	10%	5
Financing	0.000	12%	4
Mechanisation (workshops)	0.000	20%	2
Mechanisation (spare parts)	0.000	20%	2
Mechanisation (whole goods)	0.000	20%	2
Insurance	0.000	19%	3

This table provides information with regard to the correlation between the performance of each business unit and the performance of the business as a whole. The second column provides the p-values, the third column the coefficient of determination, while the last column rand the business units in order of strength.

Table 6: One-way ANOVA analysis between the overall performance of the company and the frequency with which each individual business unit are used.

Overall performance of company	Often	Seldom	Never	Sig.
Retail shops	6.9533	6.8182	6.000	0.417
Grain storage	6.9471	6.7532	7.0649	0.325
Grain marketing	7.1237	6.5802	6.9862	0.016
Financing	7.3647	6.6286	6.8383	0.001
Mechanisation (workshops)	7.3077	6.9057	6.8232	0.065
Mechanisation (spare parts)	6.9891	6.8125	7.1071	0.414
Mechanisation (whole goods)	7.3519	6.8359	6.8489	0.033
Insurance	7.1618	6.8462	6.8844	0.278

This table provides detailed information to illustrate the relationship between the frequency with which the various business units are used and the overall performance of the agricultural business. This is done by way of a one-way ANOVA analysis.

The table displays the mean value (on a 9-point Likert scale) of how customers that often use (for instance) *retail shops*; perceive the *performance* of the agricultural business. In contrast to this, the individuals that never use *retail shops* have a lower perception of the *performance* of the agricultural business as a whole (mean of 6.000) compared to the individuals that use *retail shops* often (mean of 6.9533). The often, seldom and never columns therefore indicate the average means of overall *performance* of the agricultural business for each of the individual business units. The frequency, with which each business unit is used, is tested separately against the overall performance of the company. The results indicate that there are significant relationships between the overall *performance* of the company with *grain marketing, financing* and *mechanization (whole goods)*, which indicates that the frequency with which these three business units are used do have an influence on how customers view the agricultural business as a whole (p < 0.05). Even though the analyses designate these three business units/services to have a statistically significant relationship, it does not provide any information with regard to the nature of the relationship. Therefore it is necessary to perform a post hoc test on the values which proved to be significant to determine where the significant difference is. This is called Tukey's test (Mendenhall & Sincich, 1996:655).

	Tukey's test	Mean difference	Sig.
		Grain marketing	
Often	Seldom	0.54346	0.016
		Financing	
Often	Never	0.52638	0.007
Often	Seldom	0.73613	0.001
	M	echanization (whole goods)	
Often	Never	0.50293	0.044
Often	Seldom	0.51591	0.040

Table 7: Post hoc test (Tukey's test) between the overall performance and the three business units

This table provides the nature of the relationship (where the significant difference is) between the three business units identified to have a statistically significant relationship with overall performance of the company.

Table 7 shows where the significant differences are with regard to how frequent the business units are used compared to how the respondents perceive the agricultural business as a whole. The results indicate the following:

- When Tukey's test is used, there seems to be no significant relationship between the overall level of satisfaction of the agricultural business and *grain marketing*. However, the results indicate that the frequency with which *grain marketing* is used has an influence when it comes to the overall level of satisfaction towards the company between the respondents that use the business unit seldom and often. The mean difference indicates that those individuals that use the business unit often have a more positive perception of the overall company.
- The frequency with which *financing* is used has an impact on the overall level of customer satisfaction towards the company as a whole between those individuals that use *financing* often and those using it seldom and never. The results indicate that the respondents that use *financing* often have a better perception of the overall company than those using the business unit seldom or never.
- Tukey's test for *mechanization (whole goods)* indicates that those respondents that use this business unit often have a significantly higher perception of the overall company than those using *mechanization (whole goods)* seldom or never.

# CONCLUSION

Customer satisfaction is essential for the long-term survival of any business and even more so in agricultural businesses. The purpose of this paper was to establish whether there is a relationship between how frequent business units are used and customer satisfaction towards those business units and the company as a whole. The results indicate that the more frequent business units are used, the higher would be the opinion of the customers of the particular business unit (except in the case of *retail shops* where the results were not statistically significant). However, when the frequencies of the various business units were tested against the overall level of satisfaction of the agricultural business as a whole, it was found that the customers using grain marketing, financing, and mechanization (whole goods) more often rated the *performance* of the agricultural business higher than those individuals using the particular business units seldom. Also, those customers that use financing and mechanization (whole goods) often regard the *performance* of the company as a whole to be higher, compared to those that never use the particular business units. Therefore the frequency with which customers use a particular business unit is definitely related to the satisfaction customers experience towards the business unit. It is therefore necessary to ensure repurchase behavior and build customer loyalty in an effort to increase frequency, which would ultimately lead to greater customer satisfaction for both the individual business units, but also the company as a whole.

# LIMITATIONS

Limitations pertaining to this specific study are, firstly, that only one agricultural business was examined during the course of the empirical research, albeit a major agricultural business in Central South Africa, in terms of reputation, reach and capacity. The second limitation centers on the fact that Central South Africa and this specific agricultural business focus on grain and on a smaller scale livestock, whereas other agricultural businesses in other geographic areas in South Africa will focus for instance on grapes and fruit. The third limitation concerns the fact that the various business units were used to different degrees by customers. For instance, roughly 99% of the customers make use of *retail shops*, while only 36% make use of *insurance*. Lastly, very little academic research was available with regard to the business units of agricultural businesses.

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# COMPARATIVE GEOSTRATEGIC STUDY OF MEXICO AND PANAMA FOR INSTALLATION OF AMERICA LOGISTIC PLATFORM

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### ABSTRACT

When try setting up a Logistic Platform (LP) in a nation, needs knowing social, economic and logistical aspects. In this sense, an author has defined three factors (indicators) success key to create it: the geostrategic situation, intermodality and physical space. Europe and Asia have their LP: "Zaragoza and Singapore", now is essential to study where to place the LP in America. After having done the Panama Invest 2011 and the First International Forum "Mexico, the Latin America logistic platform" in 2011, were detected as strategic the countries of Mexico and Panama to this effect. This paper proposes a comparative geostrategic study between both countries, about aspects that are considered decisive same weighted based on their relative importance, in order to identify the advantages and disadvantages of the geostrategic location of both nations to diagnose what is more viable for the America LP.

## JEL: H54, F63

KEYWORDS: Logistic platform, geostrategic viability, comparative study.

## **INTRODUCTION**

In the new context of globalized spaces, has highlighted the need to geo-locate areas and nodes where concentrate a number of business activities, raw materials availability and manufactured goods, to get them to the places that claim in shortest possible time, with minimum breaks and cargo handling costs as low as possible (Morales, 2010). One such space is occupied by logistics operators, which should not be construed as a mere physical structure, as its activities are centered mainly in management and therefore must rely on the logistics platform (LP) responsible for doing logistics operations supported by its infrastructure (Orjuela, Castro & Suspes, 2005).

García (2006) defines three factors (indicators) success key to create a LP: the geostrategic situation, intermodality and physical space. Within the geostrategic situation, must look the connectivity, accessibility or easiness with which can reach the site. Mexico and Panama have been seen as strategic countries to create the America LP (Ferrari, 2011; Martinelli, 2011). Both countries have conducted studies about logistic problems in actual infrastructure with which each account (Martner, Perez & Herrera, 2003; Henriquez, 2011), however, in the literature review not found a study on the geostrategic situation and there is not exist a comparative study of both countries showing the geostrategic advantages and disadvantage of each. Hence the importance of a geographical location study of the countries proposed as strategic, to know the advantages and disadvantages to define which of the two nations is more viable to locate the logistic platform in the American continent.

## LITERATURE REVIEW

The LP is part of one of the 12 competitiveness pillars of a nation: the Infrastructure, that when is developed, reduces the distance effect between regions, integrates the domestic market and connects at low cost the others countries and regions markets (Salai, Bilbabo, Blanke, Drzeniek & Geiger, 2012). To development competitive LP, should analyze the geostrategic situation. Within the geostrategic situation, is necessary to think about connectivity, accessibility or ease with which can reach the site. Should be noticed that the LP operates in places where there is already a development that works as countervailing dislocated element (García, 2006).In this sense, is necessary to study the LP from the geostrategic location (GSL), some authors related the geostrategic with geopolitical, military campus, war strategies and policies (Rosales, 2005; Correia, 2004). Authors as Palazuelos (2008) focus it to the commercial, to define the GSL as "various strategies that developed major countries acting as buyers and others as suppliers". To make the diagnosis that will determine the geostrategic viability of countries, Ruibal (2011) makes a comparison strategic global business logistics selected countries in South America, however, there are not more extensively developed diagnostic applying a comparative study to determine whether a nation is viable or not to place a LP.

### Proposed Comparative Study

Given the above is evident the need to do a study through a comparative chart of weighting factors, that identify the advantages and disadvantages of the geostrategic situation of both nations under the study and diagnoses which has the highest viability to be the America LP.The proposed comparative chart takes the following aspects of Ruibal (2011) studies: oceanside Atlantic and/or Pacific, territorial topography plane and/or mountain, road, rail, fluvial, maritime and air networks. In the same way, is made the contribution of the following aspects considered crucial to make the geostrategic diagnosis as: territorial extension, seasonality, geographic location, populated territory, lake network, maximum distance and transit time between littoral, subcontinents geographical connectivity (North, Central, South) and shared borders and multimodal corridors. For the study, there are 2 very important weight factors: a) Geographic location, which seeks to determine which of the two countries are better, placed strategically in relation to economies and markets in the world, if isn't well located will considered the easy way out of these markets, b) Oceanside Atlantic and/or Pacific, to define which of the nations has output infrastructure in both oceans and thus have shipping facilities to target their products to the world, quickly and directly, without having to make transfers in excess.

There are other two factors with a weight of 10%: a) Maximum distance and transit time between littoral, which, both oceans. Is essential to know how long takes in a road mode, to get from one coast to another through calculating the maximum distances, and b) Subcontinents geographical connectivity (North, Central, South) and shared borders. This aspect is defines by Ruibal (2011) as linking with subcontinents, however, more than just a link is important to know the connectivity between them and which of these have shared borders. Another important aspect that deserves comment is the inclusion of Multimodal corridors aspect, about this aspect Ruibal (2011) focuses more in inter-modality. In this paper propose to study multimodal corridors that provide insight into which of the two nations have a better use of existing infrastructure and logistics services linking. Finally, there are aspects with lower weight as seasonality and populated territory, which should be considered, but not make a definite impact when deciding where to locate the LP. The Table 1 shows the proposed chart, where can be seen that the weighting would values of 15% allocated to the most considered aspects and a 3% weight assigned to minor impact aspect. Similarly the scores for each value are on a scale of 1 to 5, where 1 corresponding to a failing grade and 5 to a very well evaluated aspect. In the characteristics column will document what each nation has evaluated aspects, if does not have these issues or are deficient the score is 1, if it has all the aspects will put it a rating of 5, this rating is weighted and at the end whoever gets the highest score of each country's total, will be geostrategically viable to create the America LP.

WEIGHTING	ASPECTS	MEXIC		PANA	MA
		CHARACTERISTIC	SCORE (1-5)	CHARACTERISTIC	SCORE (1-5)
15%	Geographic location				
15%	Oceanside Atlantic and/or				
	Pacific				
10%	Maximum distance and				
	transit time between littoral				
10%	Subcontinents geographical				
	connectivity (North,				
	Central, South) and shared				
	borders				
6%	Road network				
6%	Rail network				
6%	Fluvial and lake network				
6%	Maritime network				
6%	Air network				
6%	Territorial extension				
4%	Multimodal corridors				
4%	Territorial topography plane				
	and/or mountain				
3%	Seasonality				
3%	Populated territory				
Total = 100%	Total				

Table 1: Comparative study-chart proposed of logistic geostrategics aspects

Table 1 shows the comparative study-chart proposed to assess the geostrategic viability of nations studied to be the America Logistic Platform. Source: Own.

To data obtain will use secondary information sources, based on statistical and data officers websites of both countries.

## **CONCLUDING COMMENTS**

Mexico and Panama are strategic countries to create the LP of the Americas. A comparative study that qualifies and ponders different geostrategic logistics aspects, will allow showing advantages and disadvantages and defines which of the two is viable to locate the platform in the Americas. This is only the beginning of a series of studies to be performed before deciding which should be the LP of Americas, therefore is recommended to complete with another that include socio-economic, physical facilities and logistical aspects of intermodality and multimodality with which currently every nation have.

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# THE CONTRIBUTION OF HUMAN CAPITAL INVESTMENT IN ECONOMIC DEVELOPMENT

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## ABSTRACT

Investment in human capital concerns all the countries of the world, which are in competition for progress and wealth. Human capital investment means investment in education, instruction and health. This investment concerns, on one side, and on the other side, the adaptation of human resources to imposed changes within an economy, changes imposed by the development of high end technologies.

**JEL**: E 22, F 63, H 52, I 25, I 28, O 15

**KEYWORDS**: Investments in Human Capital; Financing Investments in Human Capital, Private Education, State Education and Human Resources Development.

## **INTRODUCTION**

Investments have a very complex role in the economic development of a country, because they influence property structures, economic branches and sub-branches, tech structures, labor structures, etc. Also, they assure an increase of capital quantity and quality, they increase economic and technical yield, they create new jobs and they ensure the participation of any country to international economic relations, created in terms of competition and competitiveness. It is a known fact that investments made with material resources have as a final destination the quantity and quality increase of fixed capital, and investments made for the increase, education and preparation of human resources generate what we call human capital.

## LITERATURE REVIEW

The theories of economic increase and development have created models for the sustainment of the labor market and education and have as a basis investments in human capital. The human factor sustains the process of economic growth by increasing the volume of the given labor at a macroeconomic level, but also its quality by increasing labor productivity. The action of the human factor within the process of economic growth keeps the evolution of the occupied active available population.

Under the quantitative aspect, the action of the human factor materializes through the volume of labor given by the occupied population within the effective labor time. Although the increase of demand for labor force is associated with economic growth, we have different opinions within the economic theory concerning the nature and dependency of the two elements. Ergo, the increase of the rate of occupation through the creation of jobs favors economic growth, only that there are opinions which claim that the expansion of labor force occupation is actually an effect, not a prerequisite of economic increase and is due to the fact that GDP increase has a direct effect on investments. In general, investments sustain the effect which determines tech progress, population increase, an increase in the quality of goods, increased economic efficiency, etc. As a concept, we find human capital within the neo-classical theory as being investments made in human beings.

Human capital is represented by professional know-how, skills, abilities and health which can lead any person to an increased capacity to create and includes future income, or a capacity of people to efficiently produce goods and services. Theories concerning the issues of economic growth and development sustain

the idea that as soon as a certain level of human capital is reached, it becomes more productive, and is positively correlated with growth rates and occupation rates within models of economic growth.

There are two main schools of thought concerning the concept of human capital, the first looks at the ability to generate income and the human being as two different things and the second one regards the individual as being himself the capital. Within modern economic theory both schools regard human capital as a model of behavior based on the maximization of personal interest within a competitive market, other forms of behavior being apriori excluded, each individual wishing to live better and better.

The entire economic theory claims the necessity of investments in education, in the context of economic development, but the impact of investments in education has not yet been fully proven, meaning in terms of volume and structure, required to develop an economic process, because the same structure and volume manifests differently from individual to individual.

We believe that the policy of education is an integral part of the general development policy of a state and education becomes an integral part of ensuring well-being in the future. Education investments as a means of forming human capital is a vital element for: economic development, increased standard of being, closing social gaps and inequalities, etc. The science-tech revolution has transformed the education system from a producer of labor force into a producer of capital. Literature describes two sorts of effects which education produces in economics: quality and quantity effects.

Quality effects increase the efficiency of economic processes because the well-trained individual is able to better manage the economic act, to take complex decisions, to ensure the democracy of economic processes, in terms of competition and competitiveness. The quality / quantity effects refer to the quality and quantity increase of the human factor and thus, more and more competent and able individuals appear, which can exploit hi-tech elements and which, due to their experience, may create their own technologies. Considering the requirements of investments in education for sustaining economic growth, we have two questions: how much does this investment cost? And who finances it?

We believe that the financial support of forming and accumulating human capital not only regards expensed destined for education and labor force formation. The financing has a wider array, because it includes government expenses to auction public goods, the safeguarding of the health of the population, insuring public order and social protection, countering pollution, etc.

The size of the public financial resources destined for investments in human capital depends only on the size of the state budget which is in turn influenced by fiscal measures which rely on population income. Due to the current financial crisis, which engulfed more and more countries, the IMF and World Bank both call for austerity budgets in unproductive areas, such as education and health.

Theoretical models of economic growth and development call for the increase of government expenses destined to the formation and accumulation of human capital which becomes more and more productive. Concerning the way in which the financing of the education system should be made, there are several opinions, and we will retain two completely opposite ones, ergo one which states that higher education must be financed from private funds alone, and the other one claims that higher education must be state-financed.

In order for the individual to exist and integrate in society, he/she needs a certain degree of education which calls for a minimum of 12 classes, on which there is no doubt concerning the expenses which must be made exclusively by the state. For the higher education system, the individual can decide for himself between state or private education, and thus he can choose the source of financing.

## RESULTS

After 20 years since the creation of the first private universities in Romania, their performances can be measured. According to the National Statistics Institute, there are over 140.000 students and around 400.000 students in state universities. Private universities annually charge income from their students which equal half of the amount that the Ministry of Education allocates for the financing of state universities. When the standings for Romanian universities were established, it was foreseen that no private universities had obtained high scores in fields such as economics and law, but poor scores in terms of engineering and medicine.

These differences which occurred on various fields within private universities are not justified, because they have enough resources to invest in laboratories and machinery for creation activities for university programs. A more and more common phenomenon is the decrease of students' quality, in both the private and state sector, their lack of professional skills and lack of motivation to perfect their skills. Unemployment is a cause which we consider insignificant for the youth, although at this time unemployment within their ranks has extended to all European countries.

In this context we can still distinguish between young people which choose to continue their studies for themselves, in order to become a doctor or lawyer, or to emigrate, to pay for their studies themselves, and those young people which choose to continue their studies in other areas of the national economy, which present a lack of qualified labor force, such as engineering, economics, agricultural engineering, where the state finances these studies. We appreciate that in many fields of the economy a highly qualified labor force would determine a superior rhythm of development and society would be more and more interested in the education of individuals. Also, we can observe the way in which the financing of the higher education system is being made, and, more importantly, must be linked to the development level achieved by the economic system. If the level of family member income can support the educational costs then they should support their expenses, and if family income is not enough, then they must be supported by the state, in the case of gifted youth.

In European countries, due to the current crisis, there is a negative relation between education and unemployment due to a faster increase of jobs which require a high qualification as compared to the number of individuals who can actually do it. The European Union admits that unemployment is a difficult issue for the social system both for new and old members. The high unemployment rate prevents the E.U. to reach its economic potential within the world economy. It has been noticed that both in developed and developing countries the risk of becoming unemployed determines an increase of the education level, so that educated workers and better prepared, professionally, and stand a better chance of gaining advantages: higher wages, higher job safety and a progressive increase of income. The main result of education is an increase of labor productivity, and, as a result, an increase of salary.

In European perspective, ever since 1957 through the Treaty of Rome, a mobility of the labor force has been established, as the right to go to another member state of the European Community to find a job, either as employee or on one's own, for a higher standard of living. The liberalization of labor force traffic concerning the European Union is a very ambitious and difficult objective to accomplish, although it is acknowledged that labor force migration is a phenomenon with a certain contribution to economic growth and the flexibility of national labor force markets. Through the migration phenomenon one produces the reduction of excessive labor force quotas in certain countries and the coverage of deficits in other countries.

Within the Lisbon Strategy of the E.U. the objective of full occupation for the labor force is stated. The Sectorial Human Resource Development Program (POS - DRU) is drafted in accordance with E.U.

requirements and with the fourth theme priority of the National Strategic Reference Framework (2007 - 2013) "The development and efficient usage of human capital in Romania". The development of human resources will be focused on the increase of investments in education and formation, insertion and maintenance on the market of more and more people, increase of labor force offer, the increase of workers' and companies' adaptability, social inclusion of vulnerable groups. POS – DRU considers the reintegration within the active population of the labor market of long term unemployed, unemployed people within rural areas, as well as vulnerable groups among which the rroma population represents the main targeted group.

Also, POS – DRU contributes to the development of human capital and the increase of competitiveness by encouraging innovation and economic development based on knowledge, including the usage of new communication and information technologies.

POS – DRU supports investments in human capital and the increase of acces to occupation by reducing unemployment and inactivity, particularly for groups with a high potential of social reintegration in education and on the labor market. Romania looks to develop its economy through productive investments as well as through investments in human capital.

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# THE STUDY OF EARNINGS MANAGEMENT AND DIVIDEND THRESHOLD

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## ABSTRACT

The earnings of a company not only concern its survival, but also affect the manager's performance measurement and stakeholder's decision. The accrual basis of accounting provides managers the discretion of financial reports. Since the funding of dividends is often limited to earnings or equity increased, the accounting earnings is one of the important factors that determine the amount of dividends. In other words, when accounting earnings are lower than the expected dividend level, managers would have the incentive for an upward earnings management to prevent decreases in dividends. Daniel, et al. (2008) found that managers treat the expected dividend as an important earnings threshold. This paper follows Daniel, et al. (2008), and adopts the 6145 companies that listed in Taiwan Stock Exchange and OTC market, from 2005 to 2010, to examine the relationship between dividend threshold and earnings management. The empirical results support our hypothesis, which is, the dividend threshold is an important incentive for the manager to engage in earnings management, which worth the stakeholders' attention.

KEYWORDS: Earnings Management, Accruals, Discretionary Accruals, Dividend Policy

## INTRODUCTION

The earnings of a company not only concern its survival, but also affect manager's performance measurement and stakeholder's decision. However, the business accounting law stipulates that a company should adopt the accrual basis of accounting, to provide managers the discretion of one's financial report, and the behavior that engage in earnings management. The past literature indicated that the incentives for the managerial earnings management are to maximize the bonus plan, smooth income, prevent decreases in earnings and Deficit, or correspond to analysts' expectation, etc.

In addition, the debt covenant of a company often stipulate that if a company pay the largest source of funding of the dividend, it must come from the earnings or the equity increased. Therefore, the earnings from the accounting report became one of the important factors that decide the amount of the dividend. In another words, when the accounting earning is lower than the expected dividend level, managers would have the incentive for engaging in an upward earnings management, to prevent decreases in payment of dividend. Daniel, et al. (2008) found that managers regard the expected dividend as an important earnings threshold. Taiwan, however, is less concerned for the relationship between expected dividend (dividend threshold) and earnings management. Thus, this study can supplement such shortage and act as a basis for conducting international comparison.

# DATA AND RESEARCH METHODS

This study used Taiwan Economic Journal Database, and collected all listed and OTC companies in Taiwan Stock Exchange Corporation (TWSE) during 2005 to 2010 as the research object. We adopted the panel data analysis, after eliminating financial related industries, state-operated enterprises and objects with incomplete empirical data, there's only 7906 companies remained. Since this regression model contained many variables that need to use the data from previous year, the number of companies in 2005 has been reduced from the samples. Additionally, some variables have missing values (undeclared or without data), so the actual empirical samples only remained approximately 6145 and 4170 for our

different regression models (regression (2) and (3)). Three procedures are used to view the relation between dividend threshold and earnings management. (1) This study follows the empirical model of Daniel, et al. (2008), and firstly adopts the cross-sectional regression model of Jones (1991), as shown below:

(1)

Total accrual (below referred as TA)  

$$TA_i = a_1 + a_2 \Delta \$ + a_3 PROPi + a_4 EQU_i + e_i$$

In the above equation, the variable is set as:

i: firm i TA: total accrual = reported earnings before extra-ordinary income – operating cash flow  $\triangle$ S: Increase in annual net sales PROP: Total property EQU: Total plant and equipment

In addition, the discretionary accruals (DA), that is the residuals  $e_i$  of the cross-sectional regression model from Jones (1991) shown above, equals TA – NDA (Non-discretional accruals, that is the predictive value of the cross-sectional regression model from Jones (1991) shown above).

(2) We used the descriptive statistics value of each variable to observe whether a significant difference in DA between the companies that pay dividend and the companies that don't pay dividend and the companies with Deficit and the companies without Deficit.

(3) We used the multiple regression models to see the relationship between expected dividend (dividend threshold) and the managerial earnings management after controlling other factors. The empirical regression formula and the variable setting used in this study are as shown below:

- $i. \quad DA_{it=\beta_0+\beta_1}DEFP_{it-1+\beta_2}DEFNP_{it-1}+\beta_3PAYER+\beta_4RE_{it-1}+\beta_5CC_{it-1}+\beta_6SIZE_{it-1}+\beta_7LEV_{it-1}+\beta_8MB_{it-1}+\beta_1PAYER+\beta_4RE_{it-1}+\beta_5CC_{it-1}+\beta_6SIZE_{it-1}+\beta_7LEV_{it-1}+\beta_8MB_{i$
- ii. Add previous earnings threshold (EARN) and analyst forecast threshold (FORC) to control the variables in regression.

 $DA_{it} = \beta_0 + \beta_1 DEFP_{it-1} + \beta_2 DEFNP_{it-1} + \beta_3 PAYER + \beta_4 RE_{it-1} + \beta_5 CC_{it-1} + \beta_6 SIZE_{it-1} + \beta_7 LEV_{it-1} + \beta_8 MB_{it-1} + \beta_9 EARN_{it-1} + \beta_{10} FORC_{it-1} + \sum_{1}^{19} \theta_{jt} Ind_{jt} + \beta_{11} YR + e_{it}$ (3)

In the equations  $(2)\sim(3)$ , each variable setting is:

CC: The salary and bonus of managers

SIZE: Company size = Log (the total book assets)

LEV: Gearing ratio = total liabilities / total book assets

MB: Book-to-market ratio = (year-end total book assets – year-end total shareholders' equity + year-end stock price  $\times$  outstanding shares) / year-end total book assets

IND: In the category of industry, we merged the industries with fewer firms into the industries with similar characteristics and obtained 20 categories.

YR: Yearly dummy variable. If the fiscal year is 2010 = 1, otherwise it will be 0.

DEFP: The Deficit of company that pays dividend;

DEFNP: The Deficit of company that does not pay dividend. For DEFP and DEFNP, Deficit = Max (0, earnings shortfall). In the formula above, earnings shortfall = expected dividends (EXPD) – premanaged earnings (PERM). Among which, EXPD (expected dividend) = actual dividend paid in prior year; PREM (pre-managed earnings) = Operating cash flow + NDA – preferred stock dividends.

PAYER: Dummy variable. If the amount of paid dividend in prior year is larger than zero, then PAYER=1, otherwise it will be zero.

RE: Retained earnings.

EARN : Annual earnings reported earnings before extra-ordinary income – preferred stock dividend. FORC: Analyst forecast earnings per share at the end of each year (if there's more than one predictive value, then substitute with an average value)  $\times$  number of shares outstanding.

The regression equations (2) to (3) are used to verify the H1 hypothesis: When accounting earnings are lower than expected dividend level, managers may engage in an upward earnings management, in order to avoid a reduction in payment of dividend.

## **EMPIRICAL RESULT**

The focus of this study is to examine the relationship between cash dividend payouts and earnings management. Unlisted Table showed that in a company that paid dividend, there's about 33.75% positive Deficit, and the expected dividend (EXPD) is greater than the real earnings (PREM), and this result is slightly higher than the one of previous research (such as Daniel, et al. 2008). The average Deficit is about 6.36 hundred million NT. The average of paid dividend among all dividend-paying companies is about 8.39 hundred million NT. Besides, among dividend–paying companies without any Deficit, only 26.7% of them have positive discretionary accruals (DA). In contrast, the percentage of dividend-paying companies with Deficit is as high as 79.3% have positive DA.

If we arrange companies from having the least to the greatest Deficit, and divide into six groups, except the first group of zero-Deficit (2678 companies), the other five groups each contained approximately 273 companies. The data of Table 2 showed that in the zero-Deficit group, the average DA is negative; the average DA of each positive Deficit group is positive, and increases as Deficit increases. In the second group with the least Deficit, there're about 57.5% companies with DA that are greater than their Deficit. Yet in the fourth, fifth and sixth group, the average of DA is smaller than the average of the Deficit, which represents that the Deficit of many companies can't be eliminated by DA. Meanwhile, the percentage that DA is greater than its Deficit decreases as well.

Table 1: The Discretionary Accruals of Dividend-Paying Companies with Deficit and without Deficit

	Number of Company	Deficit(Average, million NT)	Hundred	DA(Average, million NT)	Hundred	DA> Deficit (%)	number
1 <sup>st</sup> Group Deficit=0	2678		0		-7.79		
Deficit>0 (Total)	1364		6.37		4.77	699 (51.24%)	
2 <sup>nd</sup> Group	273		0.19		0.39	157(57.51%)	
3 <sup>rd</sup> Group	273		0.68		1.30	149(54.58%)	
4 <sup>th</sup> Group	273		1.53		1.44	117(42.86%)	
5 <sup>th</sup> Group	273		3.55		3.11	137(50.18%)	
6 <sup>th</sup> Group	272		25.91		17.67	139(51.10%)	

This table shows the relationship between discretionary accruals and Deficits of the sample companies, which are classified into six groups according to their Deficits.

We use the regression model to control other variable to observe the relationship between Deficit and DA. In Table 2, regression equation (2) observed the impact of the payment of cash dividends (PAYER) and the Deficit upon DA. Our Deficit variable depends on whether there is cash dividends or not, and is divided into the two of variables (*DEFP and DEFNP*). If a dividend-paying company has positive Deficit of earnings (*PREM*), it means the premanaged-earnings do not meet the expected dividend level (EXPD). Table 2 shows that the regression coefficient of the Deficit of companies that pay dividend (DEFP) is

significant at the 1% level of significance. This means that the expected dividend level is an important earnings threshold, which is consistent with the result of Daniel, et al. (2008).

Whereas, the regression coefficient of the Deficit of a company that does not pay dividend (DEFNP) is negatively significant at the 1% level of significance. The results means that a company which is closer to zero earnings threshold will be more likely to engage in earnings management (DA positive); if farther from zero earnings threshold, companies will consider the cost of earnings management, and thus the DA values are lesser. This is consistent with Kerstein and Rai (2007). The regression coefficient upon PAYER variable is also significant at the 5% level of significance, which means a dividend-paying company's DA value significantly larger than the payment of cash dividends of companies. In addition, a coefficient of retained earnings (RE) is significantly negative, in line with theoretical expectations, which means that retained earnings is the legitimate source of cash dividends, so the higher retained earnings leads to the fewer needs of earnings management.

Table 2: The Affecting Factors of Discretionary Accruals: Regression Equation (2) and Regression Equation (3)

Name of Variable	Regression Coefficient	T value	V IF	Name of Variable	Regression Coefficient <sup>2</sup>	T value	V IF
DEFP <sub>it-1</sub>	1.449***	20.05	1.07	DEFP <sub>it-1</sub>	1.158***	16.06	1.100
DEFNP <sub>it-1</sub>	-0.548***	-4.85	1.11	DEFNP <sub>it-1</sub>	-0.162	-0.86	1.128
PAYER	207.113**	2.09	1.23	PAYER	167.77	1.08	1.155
RE it-1	-0.140***	-13.98	1.28	RE <sub>it-1</sub>	0.074***	2.76	5.915
CC <sub>it</sub>	-17.031	-0.51	1.22	CC <sub>it</sub>	1.860	0.05	1.163
SIZE <sub>it-1</sub>	-1311.820***	-13.68	1.69	SIZE <sub>it-1</sub> ***	-1710.68***	-13.14	1.764
LEV <sub>it-1</sub>	-587.770**	-2.20	1.19	LEV <sub>it-1</sub>	-414.745	-1.05	1.216
MB <sub>it-1</sub>	-2.6835	-0.12	1.03	MB <sub>it-1</sub>	19.483	0.51	1.020
Number of	6143			EARN <sub>it-1</sub>	-0.135***	-3.18	6.072
Sample							
$\mathbb{R}^2$	0.156			FORC <sub>it-1</sub>	-0.177***	-3.04	1.122
Adjusted R <sup>2</sup>	0.152			Number of Sample	4170		
F value	140.40***			$R^2$	0.1233		
Name of	Regression	T 1		Adjusted R <sup>2</sup>			
Variable	Coefficient	T value	V IF	-	0.117		
DEFP <sub>it-1</sub>	1.449***	20.05	1.07	F value	19.40***		

This table shows the empirical results of regression equation (2) and regression equation (3). The regression coefficient is at 1% level of significance. Regression coefficient1 is the result of regression equation (2); Regression coefficient2 is the result of regression equation (3). \*\*\* :  $\alpha(\text{Significant Level}) < 1\%$ ; \*\* :  $\alpha < 5\%$ ; \* :  $\alpha < 10\%$ 

Last, we added the annual earnings of the previous year (EARN) and analysts forecast earnings (FORC) of the same year into the regression equation (2) to obtain the regression equation (3). We expected to control the affect that managers engaged in earnings management to achieve the earnings thresholds (Burgstahler and Dichev 1997) of the previous year as well as analysts forecast threshold (Degeorge et al. 1999). Table 2 showed that even with the addition of these two variables, the regression coefficient upon the Deficit of a dividend-paying company (DEFP) are still positively significant, while that of the Deficit of a company that does not pay dividend (DEFNP) then become not significant at the 1% significance level. Accordingly, the empirical result of regression equation (2) to regression equation (3) supports the hypothesis of this study.

# CONCLUSION

The empirical result of this study supports our hypothesis: when the accounting earnings are lower than the expected dividend level, managers might engage in an upward earnings management to avoid decrease in the dividend payout. That is, expected dividend level is an important earnings threshold. Even under the condition of controlling other affecting factors, the difference of premaneged-earnings and expected dividend level can explain most differences of discretionary accruals (DA). In other words, the dividend threshold is another important incentive for managers to engage in earnings management.

### BIOGRAPHY

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# THE PRICE-VOLUME RELATIONSHIP OF FIRM SIZE INDICES: EVIDENCE FROM TAIWAN STOCK MARKET

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## ABSTRACT

Studies on price-volume relationship for emerging markets have been few and far between in the past primarily because emerging markets have been lacking firm size stock index. To establish firm size indices, this study uses the companies in Taiwan's stock market (listed and over-the-counter) as the sample, treating the companies' market value as the proxy variable for firm size. The companies are sequenced after eliminating the bottom 5% with the lowest turnover and then divided into 10 groups. Applying the approach of Taiwan Capitalization Weighted Stock Index, the indices of different firm sizes are obtained respectively. Then, this study uses DCC-GARCH (Engle, 2002) to examine the price-volume relationship before and after financial tsunami. Empirical results show that the dynamic conditional correlation between the two series of rate of returns and volume rate of change has a high stability, and is even more stable after the financial tsunami. Research findings also reveal that the fluctuation in Taiwan's stock market before financial tsunami period was a "price before volume" effect. After the financial tsunami, the price-volume relationship did not exist. The results may suggest that investors can focus on the changes in volume when there is no sudden financial event.

**JEL:** G01; G14; G15; G32

**KEYWORDS:** Price-Volume Relationship, Firm Size Index, Financial Tsunami, dynamic conditional correlation, DCC-GARCH

# INTRODUCYION

With regards to the relationship between price and volume in stock markets, Copeland (1976), Jennings, Starks, and Fellingham (1981), and Jennings and Barry (1984) were among the first to point out the process in which market information further affects changes in returns through variations in trading volume. When a trader receives new information and reflects this in the trade, the variations in price would have the carryover relationship of "volume before price". Price-volume relationship is viewed as the process of trading message transmission. After that, many scholars started studying price-volume relationship. Majority of these studies were limited to the relationship between returns and trading volume, while only a few studies focused on the relationship between returns and fluctuations in trading volume. This study therefore examines the market's price-volume fluctuation changes under different firm sizes before and after the global financial tsunami in 2008.

Since the price-volume relationship is a relationship about the fluctuations between two variables, the empirical analysis in traditional GARCH model hypothesize that the common variance relationship between the two series is constant. That is, the residuals between the two series have a Constant Conditional Correlation (CCC). However, this hypothesis is unreasonable intuitively, since the estimated correlation coefficient would be biased if a CCC is hypothesized when the time series is faced with structural impact. Moreover, Tse (2000) also pointed out that setting CCC would result in a problem of robust estimated parameters wherein additional tests would be needed. Thus, Engle (2002) used two-stage

estimation method to avoid the problem of excessive parameters, and then set the conditional correlation as non-constant. This is the two-variable GARCH model under DCC (Dynamic Conditional Correlation Model). Since the DCC-GARCH model is being widely used in empirical studies on the fluctuations in returns of financial assets, this study adopts this model to study the price-volume relationship of firm size indices.

### **REVIEW OF RELATED LITERATURE**

A basic economics concept is both the supply and demand in the market determine the equilibrium price and volume; thus, analysis of financial assets' prices should include trading volume in order to completely analyze trading information. The methods of previous studies generally hypothesized a fixed variance for the fluctuations in price and volume, but high frequency financial data usually has the problems of autocorrelation and conditional heteroskedasticity. Engle (1982) developed the ARCH model in order to solve these two problems, and Bollerslev (1986) expanded this model into the GARCH model to describe the volatility clustering phenomenon of time series. Many literatures (such as Engle (1982), Bollerslev (1986), and Nelson (1991)) all proposed that if the time series displays conditional heteroskedasticity, then the variance can be characterized by using the GARCH model. On the topic of overall and financial data, there are often data that rejects the homogeneous variance hypothesis scenario. The GARCH model aptly allows the variance to be dependent on past variances and interference term, which allows for the existence of conditional heteroskedasticity. At the same time, this type of model can catch the volatility clustering phenomenon commonly seen in time series data. Thus, the GARCH model is one of the primary methods for studying price-volume relationship in recent years.

## **RESEARCH DATA AND METHODOLOGIES**

This paper primarily studies the changes in volatility of the Taiwanese stock market before and after the financial tsunami. Thus, for the post-financial tsunami analysis, this paper collects data between September 1, 2007 and August 31, 2010. In order to eliminate the impact in the pre-financial tsunami period and to be consistent, this paper collects data between September 1, 2003 and August 31, 2006 for its pre-financial tsunami analysis. The data used in this paper originates from the Taiwan Economic Journal Data Bank (TEJ). This paper mainly studies the impact of financial tsunamis, so the number of samples for the post-tsunami period is set as the target. These samples are divided into 10 groups so there are 110 companies per group. Companies with the biggest firm size comprise the big size stocks; companies with the smallest firm size comprise the small size stocks. The medium size indices are selected from the latter half of the fifth group and the former half of the sixth group. For the pre-tsunami period, 110 companies from each type are selected, so the first 110 companies with the biggest market values are classified into big-sized stocks. Companies with sequence numbers 376 to 485 based on market value are classified as medium-sized stocks.

This paper employs the GARCH model as its research methodology. Bollerslev (1986) pointed out that ARCH/ GARCH required leptokurtic distribution and conditional variance. Our data show that the number of observations in this research presented high leptokurtic distribution, thus conditional variance still needs to be taken into consideration. However, the traditional GARCH empirical analysis assumes that the common variance relationship between two series is CCC, which is a rather unreasonable practice. Thus, this paper will use Engle's (2002) bivariate GARCH model under DCC to proceed with its research.

This empirical study targets to probe into the co-moving relationship of rate of returns and trading volume under different firm sizes. Table 1 shows that all the AIC values in the lagging period are very close to one another. Based on a parsimonious goal, this paper first sets AR(1)-GARCH (1,1) model for its

empirical research. The intersecting item's lagging period value in the variance equation is also set as 1. Thus, the models for the co-moving relationship between rate of returns and trading volume are shown in equations 1 to 5:

$$r_t = \alpha_1 + \beta_1 r_{t-1} + \gamma_1 v_{t-1} + \varepsilon_{r_t}$$
(1)

$$\begin{aligned} v_{t} &= \alpha_{2} + \beta_{2} v_{t-1} + \gamma_{2} r_{t-1} + \varepsilon_{v_{t}} \end{aligned} (2) \\ h_{rr,t} &= \psi_{1} + \phi_{1} h_{rr,t-1} + \theta_{1} h_{vv,t-1} + \omega_{1} \varepsilon_{1,t-1}^{2} \end{aligned} (3) \\ h_{vv,t} &= \psi_{2} + \phi_{2} h_{vv,t-1} + \theta_{2} h_{rr,t-1} + \omega_{2} \varepsilon_{2,t-1}^{2} \cr q_{rv,t} &= \overline{\rho}_{rv} + \alpha \bigl( z_{r,t-1} z_{v,t-1} - \overline{\rho}_{rv} \bigr) + \beta \bigl( q_{rv,t-1} - \overline{\rho}_{rv} \bigr) , \cr \rho_{rv,t} &= q_{rv,t} \Bigl/ \sqrt{q_{rr,t} \cdot q_{vv,t}} \end{aligned} (5)$$

### Empirica Analysis

Regarding the mean equation coefficient estimation in equations (1) and (5), as mentioned earlier, AR(1) is used to estimate. Since the focal point of this paper is at observing variance equations and covariance equations, thus the determination, estimation process, and results related to mean equations are not presented. Table 1 shows the coefficients of variance equations (3) and (4) and covariance equation (5) under the DCC-GARCH model of each stock market. In the covariance equation, this paper finds that the coefficients in the covariance equation for price-volume relationship  $\alpha$  and  $\beta$  are significant, also that  $\alpha + \beta < 1$ . This means that the correlation coefficient of price-volume relationship changes according to time. This also shows whether or not using DCC-GARCH to study the variations in price-volume relationship is reasonable. Table 1's right half shows the DCC covariance equation coefficients  $\alpha$  and  $\beta$  of price-volume at each type of firm size index during pre- and post-financial tsunami. It can be seen from Table 1 that majority of the coefficients are significant (only small size stocks are insignificant pre-financial tsunami). The implication of this is that using DCC-GARCH model to study the volatility relationship of price-volume is reasonable.

The  $\alpha$  coefficient represents the effect of the previous period's standardized residual on price-volume's dynamic conditional correlation coefficient, which is also the continuity of dynamic conditional correlation. If the  $\alpha$  coefficient is big, this means that the effect of the previous period's standardized residual on the dynamic conditional correlation coefficient is bigger. This paper finds that most  $\alpha$  coefficients were insignificant except for big size index during pre-financial tsunami (0.0276) and small size index during post-financial tsunami (0.0616). This implies that the effect of previous period's standardized residual on dynamic conditional correlation coefficient is not big.

On the other hand,  $\beta$  coefficients represent the effect of the previous period on price-volume's dynamic conditional correlation. If the  $\beta$  coefficient value is big, this means that the dynamic conditional correlation between the two series is rather stable; but if the  $\beta$  coefficient is negative, this means that the volatility of the dynamic conditional correlation is rather severe. The results of this paper show that the  $\beta$  coefficients, regardless if pre- or post-financial tsunami, are significantly positive (0.7981 $\rightarrow$ 0.8597, 0.8525 $\rightarrow$ 0.8860, 0.6801 $\rightarrow$ 0.8494), which shows that the dynamic conditional relation between the two series is more stable. It also significantly increases post-financial tsunami to as high as 0.8, which implies that the dynamic conditional correlation between the two series of rate of returns and trading volume variation rate has a high stability. From the changes in the dynamic conditional coefficients significantly increased after the financial tsunami. This means that the dynamic conditional correlation between price and volume is more stable post-financial tsunami. Tying this in with the said results for  $\alpha$ 

coefficients, it can be concluded that the stock market for all firm sizes in Taiwan shows the lessening continuity of dynamic conditional correlation and trending towards stability. This could be related to the series of policies implemented by the Taiwanese government after the financial tsunami.

## Table 1: Estimated Results of Price-Volume Relationship under DCC-GARCH Model

		$h_{rr,t} = \psi$	$v_1 + \phi_1 h_{rr,t}$	$-1 + \theta_1 h_{vv}$	$t-1 + \omega_1 \varepsilon_{1,t-1}$	-12					
		$h_{vv,t} = \psi$	$v_2 + \phi_2 h_{vv}$	$t_{t-1} + \theta_2 h_r$	$r,t-1 + \omega_2 \varepsilon_2$	$2, t-1^2$					
		$q_{rv,t} = \bar{\mu}$	$\bar{p}_{rv} + \alpha (z_r)$	$,t-1^{z_{v,t-1}}$	$-\overline{\rho}_{rv} + \beta (q_i)$	$rv,t-1 - \overline{\rho}_{rv}$	), $\rho_{rv,t} =$	$q_{rv,t}/\sqrt{q_{rr}}$	$q_{vv,t} \cdot q_{vv,t}$		
index	perio d	$\psi_1$	$\psi_2$	$\phi_{l}$	$\phi_2$	$\theta_{1}$	$\theta_2$	$\omega_{l}$	$\omega_2$	α	β
		-0.0095	0.0164	0.2725 *	-0.1772	0.0106	0.0522 *	-0.1826	0.0034	0.0276 **	0.7981 ***
big size	pre-	(0.7960)	(0.6536)	(0.0613)	(0.6327)	(0.7790)	(0.0966)	(0.1296)	(0.8275)	(0.0111)	(0.0000)
stock s		-0.0495	0.0054	-0.0006	-0.7616 ***	0.0404	0.0199	0.0049	0.0322 ***	0.0124	0.8597 ***
3	post-	(0.1785)	(0.8821)	(0.9962)	(0.0045)	(0.2748)	(0.5879)	(0.9507)	(0.0075)	(0.2438)	(0.0000)
medi		-0.0801 **	-0.0139	0.2041 *	-0.1301	0.0185	0.0422 *	-0.1754	0.0027	0.0124	0.8525 **
um	pre-	(0.0316)	(0.7104)	(0.0926)	(0.3107)	(0.6259)	(0.0986)	(0.1394)	(0.6285)	(0.4150)	(0.0145)
stock		-0.1193 ***	0.0063	0.2418 *	-0.0758	-0.0109	0.0263	-0.1325 **	0.0010	-0.0054	0.8860 ***
s	post-	(0.0012)	(0.8659)	(0.0590)	(0.8199)	(0.7659)	(0.4813)	(0.0450)	(0.9540)	(0.4320)	(0.0000)
small		-0.0548	0.0274	0.2186 *	-0.4504 **	0.0260	0.0413 *	-0.2368 *	0.0157 **	0.0053	0.6801
small size stock	pre-	(0.1406)	(0.4614)	(0.0534)	(0.0151)	(0.4862)	(0.0992)	(0.0532)	(0.0488)	(0.5883)	(0.2970)
Stock	post-	-0.1036 *** (0.0051)	-0.0028 (0.9403)	0.5919 (0.6525)	0.2256 (0.3918)	-0.0006 (0.9865)	-0.0741 ** (0.0460)	-0.4923 (0.6190)	-0.0131 (0.2819)	0.0616 *** (0.0000)	0.8494 *** (0.0000)

The coefficients in equations (3) and (4) represent the two-step autocorrelation and the two-step intersecting correlation, wherein  $\phi_1$  and  $\phi_2$  describe the two-step autocorrelation, representing the effect of the previous period's variance on the current period's variance, or in other words, the continuity of volatility. It can be observing the values in the table that with the exception of each type of indices (0.2725, 0.2041, 0.2186) and small size trading volume (-0.4504) pre-financial tsunami, and big size trading volume (-0.7616) post-financial tsunami which were significant, all others were insignificant. If the significance is decreased to 0.05, only the small size trading volume (-0.4504) pre-financial tsunami and big size trading volume (-0.7616) post-financial tsunami were significant. This means that in comparing price-volume relationship, the continuity of price variance and trading volume variance are both insignificant.  $\theta_1$  and  $\theta_2$  represents the two-step intersecting relationship, which is also the transmission of volatility. All  $\theta_1$  are insignificant regardless if pre- or post-financial tsunami. This means that the prices of each type of Taiwan's indices are not affected by the pre-period's trading volume, so there is no volume-before-price scenario. On the other hand for  $\theta_2$ , they all show as significant and positive pre-financial tsunami (0.0522, 0.0422, 0.0413), but only small size stocks show as significantly negative (-0.0741) post-financial tsunami. This result shows that during pre-financial tsunami, all type of indices in Taiwan show price-before-volume.

# CONCLUSION AND RECOMMENDATIONS

This paper mainly uses the dynamic conditional correlation model to study the spillover effect of volatility. The primary subject it looks into is the price-volume relationship of firm size indices. Using the financial tsunami, it studies the changes of the said factors pre- and post-financial tsunami. The results of this study show that the financial tsunami has a significant effect on the dynamic conditional correlation of price-volume. Thus, using the dynamic conditional correlation model is reasonable. On the price-

volume relationship related to volatility, this paper finds that during pre-financial tsunami, the volatilities of each type of index in Taiwan show a price-before-volume scenario. However after the financial tsunami, the causal relationship between price and volume no longer exist in Taiwan's stock market.

On the firm size message transmission effect related to volatility, this paper discovers that it is insignificant pre-financial tsunami, yet changes significantly into a positive relationship post-financial tsunami. This once again echoes the research results of Conrad, Gultekin, and Kaul (1991), Chelley-Steeley and Steeley (1996), and Wang Yuan Zhang (1999). However, this paper did not notice signs of firm size message transmission reversal. Based on this paper's results, during pre-financial tsunami, the financial market was operating normally so messages reflected regardless of the firm size. Thus, the firm size message transmission effect did not exist during pre-financial tsunami, and only reflected in the price-volume relationship. The results of this paper provide investors with recommendations for decision-making: when there is no sudden financial event, focus on the changes in volume; after a sudden financial event, focus on big firm size indices. This would help in the betterment of investment benefit

## BIOGRAPHY

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# AN ESTIMATION OF ECUADOR'S EXPORT DEMAND FUNCTION ON TRADE WITH THE US: 1965-2011

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### ABSTRACT

This paper employs the bounds testing approach to cointegration to empirically estimate Ecuador's export demand function with the US between 1965 and 2011. We develop two different export demand models based on previous empirical studies of this nature. Model I defines real exports as a function of the US real GDP, relative prices, exchange rate volatility, and dollarization. Model II relates real exports to US real GDP, real exchange rate, volatility, and dollarization. Results confirm a unique cointegration relationship between exports and its regressors in Models I & II, permitting us to estimate the short-run and long-run elasticities of Ecuador's export demand function with the US. In the long run, in both models, GDP is positive and elastic, while volatility is positive and inelastic. Relative prices in Model I are not statistically significant. Both models reveal that dollarization has had a significant, but negative and inelastic long-run and short-run impact on Ecuador's exports to Model II in terms of the strength of cointegration, long-run and short-run elasticities, adjusted R2, and in satisfying the diagnostic tests.

#### JEL CLASSIFICATION: F14, F31

KEYWORDS: Ecuador, export demand, dollarization, elasticity, cointegration

#### **INTRODUCTION**

While Ecuador is a geographically diverse country, it has been fraught by an imposing concurrence of natural, economic and political events in the last forty years that culminated in a perfect storm of economic collapse in the latter 1990's, forcing it to abruptly dollarize its economy. Within a few months of dollarization, the monetary system steadied, calming currency speculation, financial risk, and exchange rate volatility. While numerous studies (among them, Matthews et al, 2006; Quispe-Agnoli & Whisler, 2006, Minda, 2005, Schuler, 2005) have explained the macroeconomic benefits of dollarization in Ecuador, no study exists to quantify these benefits, in particular in terms of international trade, and in this case with its host country, the US. The objective of this study is to estimate Ecuador's export demand function with the US from 1965-2011, with particular emphasis on the impact of dollarization on these functions.

#### METHODOLOGY

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In order to estimate Ecuador's export demand function with the US, we first specify Model I in Equation (1) and Model II in Equation (2). Equations (1) and (2) may in turn be expressed as an Error Correction Model (ECM) following Pesaran, *et al.* (2001) as in Equations (3) and (4).

$$\ln REXP_t = \beta_0 + \beta_1 \ln RGDP_t + \beta_2 \ln RP_t + \beta_3 \ln VOL_t + \beta_4 D_t + \varepsilon$$
(1)

$$\ln REXP_t = \varphi_0 + \varphi_1 \ln RGDP_t + \varphi_2 \ln RER_t + \varphi_3 \ln VOL_t + \varphi_4 D_t + \varepsilon$$
(2)

$$\Delta \ln REXP_{t} = \alpha_{0} + \sum_{i=1}^{n} \vartheta_{i} \Delta \ln REXP_{t-i} + \sum_{i=0}^{n} \gamma_{i} \Delta \ln RGDP_{t-i} + \sum_{i=0}^{n} \vartheta_{i} \Delta \ln RP_{t-i} + \sum_{i=0}^{n} \eta_{i} \Delta \ln VOL_{t-i} +$$
(3)

$$\alpha_1 D_{1t} + \lambda_1 \ln REXP_{t-1} + \lambda_2 \ln RGDP_{t-1} + \lambda_3 \ln RP_{t-1} + \lambda_4 \ln VOL_{t-1} + \omega_t$$

$$\Delta \ln REXP_{t} = \alpha_{0} + \sum_{i=1}^{\infty} \omega_{i} \Delta \ln REXP_{t-i} + \sum_{i=0}^{\infty} \psi_{i} \Delta \ln RGDP_{t-i} + \sum_{i=0}^{\infty} \kappa_{i} \Delta \ln RER_{t-i} + \sum_{i=0}^{\infty} \pi_{i} \Delta \ln VOL_{t-i} + v_{1}D_{1t} + \theta_{1} \ln REXP_{t-1} + \theta_{2} \ln RGDP_{t-1} + \theta_{3} \ln RER_{t-1} + \theta_{4} \ln VOL_{t-1} + \omega_{t}$$

$$(4)$$

In the above equations, the symbols ln,  $REXP_{t}$ , t,  $RGDP_{t}$ ,  $RP_{t}$ ,  $RER_{t}$ ,  $VOL_{t}$ ,  $\varepsilon_{t}$  and  $\omega_{t}$  denote respectively, the natural logarithm, real export value, time, real GDP, relative price of exports, real exchange rate, exchange rate volatility, error term and white noise.  $\Delta$  is the first difference operator, and  $D_{t}$  is a dummy variable representing the period of dollarization in Ecuador beginning in 2000. We use annual data from 1965 to 2011 to estimate Models I and II. The data series on Ecuador's nominal exports and its export price index, US nominal GDP and price index, domestic price index, and nominal exchange rates are taken from the International Monetary Fund's *International Financial Statistics* and the *Direction of Trade Statistics* databases (http://elibrary-data.imf.org).

### RESULTS

T 11 A D

#### **Cointegration Among Variables**

1 , т

Table1: Cointegration Results-Ecuador's Export Demand Function, Models I &II

	s of the F-statistic: in 10 pe	rcent level		ent level	1 perce	nt level
k	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
4	2.45	3.52	2.86	4.01	3.74	5.06
Calculated F-statistic	:					
Calculated F-statistic	: MODEL 1:	FX(X Y, RP, VO	OL, D)	14.40831***		

Note: This table shows the results of the ARDL bounds test for cointegration. Critical values are taken from Pesaran, Shin, & Smith (2001, Table CI(iii) Case III, p. 300). k is the number of regressors. \*\*\* indicates statistical significance at the 1 % level.

**N I I I D D T** 

-	able 2: Ecuador's	Long-run Elasticities	- Export Demand	Function,	Models I &II	

**F1** (\* \*/\*

Model I			Model II		
Explanatory Variables	Coefficient	<i>t</i> -statistic	Explanatory Variables	Coefficient	t-statistic
Constant	-12.4879	-1.7008	Constant	-8.8004	-1.4885
InRGDP <sub>t</sub>	1.3718***	2.7183	InRGDP <sub>t</sub>	1.1245**	2.4594
nRPt	-0.0165	-0.3129	lnRER	-0.0022	-0.1148
nVOL	0.2311***	5.3960	lnVOL	0.1757***	3.8283
D <sub>1t</sub>	-0.4163***	-2.6024	D <sub>1t</sub>	-0.3015*	-1.662
Adjust. R-squared ( $\overline{R}^2$ )	0.666		Adjust. R-squared ( $\overline{R}^2$ )	0.6294	

As Table 1 reveals, the calculated Wald F-statistic is 14.408 for Model I and 10.48 for Model II, both of which are above their critical upper bound values at the one percent level. Thus cointegration exists between the dependent variable and its regressors in both models, and we reject the null hypothesis, making way for estimating the long-run and short-run partial elasticities.

Model I			Model II		
Regressors	Coefficient	t-statistic	Regressors	Coefficient	t-statistic
Constant	0	0.0631	Constant	0	0
$\Delta lnREXP_{t-3}$	0.3881***	0.1024	$\Delta lnREXP_{t-3}$	0.3291***	1.052
$\Delta \ln RGDP_{t-4}$	-5.385***	1.0300	$\Delta \ln RGDP_{t-4}$	-5.383***	1.137
$\Delta \ln RP_{t-2}$	0.5530**	0.2024	$\Delta lnRER_{t-4}$	-0.0596***	0.0153
$\Delta ln VOL_{t-4}$	-0.1395***	0.0250	$\Delta lnVOL_{t-4}$	-0.1366***	0.045
Dt	-0.2863***	0.0437	Dt	-0.1680***	0.0446
ECM <sub>t-1</sub>	-0.6878***	0.0852	ECM <sub>t-1</sub>	-0.5571***	0.0811

## Table 3: Error-Correction Model and Short-run Elasticities in Export Demand Function

Note: This table shows the results of the short-run elasticities of the error-correction model.\*\*\*, \*\*, and \* indicate statistical significance at the 1% 5%, and 10% level, respectively.

Table 4: Results of the	<b>Diagnostic</b>	Test for the	Selected A	RDL Model

	Exports N	lodel I	Exports Model II		
Explanatory Variables	Coefficient	p-value	Coefficient	p-value	
$R^2$	0.8079		0.7776		
Adjusted R <sup>2</sup>	.7045		0.6706		
Durbin Watson Test	2.5222	0.8605	2.2002	0.6111	
Breusch-Godfrey Test	4.5885	0.6676	1.2497	0.3181	
Reset Test	1.1869	0.3225	0.3079	0.7377	
Jarque Bera Test	0.5666	0.7533	0.3538	0.8379	
Augmented Dickey-Fuller Test	-3.0737	0.1487	-3.5915	0.1450	

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377

PLANNERS IN MEDIATION

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#### ABSTRACT

A commonality of the professions of mediation and financial planning is dealing with the emotional aspects of the client(s). It is surprising then that more formal training on management of the client's emotions has not been presented by either vocation. The four aspects of self awareness, self management, social awareness, and relationship management make up the components of Emotional Intelligence. This allows an individual to monitor his or her own emotions, the emotions of other, and to use this information to create a positive outcome. The professional Financial Planner who works in Mediation can benefit greatly from the study and mastery of Emotional Intelligence.

**JEL:** Z00

**KEYWORDS:** Emotional Intelligence, financial planners, mediation

#### **INTRODUCTION**

Emotions are a control factor determining outcome in both Financial Planning and Mediation. The environment of a mediation where two conflicting parties meet to negotiate some form of agreement (with a neutral third-party to preside as a communications facilitator) fosters a setting in which a broad range of emotions are normally exhibited. An experienced financial planner must be prepared to answer the following questions: What happens when the two different mediums combine to create a volatile situation? How does the financial professional manage this and stay in control? How can the financial professional enhance the process to create greater opportunity for a more positive outcome?

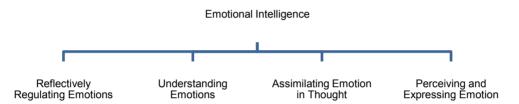
Financial issues are a main source of emotional stress. "Money evokes emotions such as stress, fantasy, irrationality, and fear" (Danford, 2012, p. 25). This financial stress is also one of the main drivers of the emotional outbursts experienced in both Financial Planning and Mediation meetings. Numerous Financial Planners are familiar with the adage of being the professional to assist in taking the emotion out of the investing process. Much research has been produced regarding the recognition and acknowledgement of an individual's emotional connection to his or her money or financial well-being (Britt, Huston, & Durband, 2010; Colfax, Rivera, & Perez. 2010). Mediation is also an environment where many times financial discussion or negotiation is the main focus, whether it be civil or family mediation, and if not, certainly an important secondary topic.

Being able to recognize and manage these emotions, from one's own viewpoint, and that of the other participants, is part of the basis of Emotional Intelligence. Emotional Intelligence is the ability to recognize, assess, and control one's own emotions and that of others (Mayer, Caruso, & Salovey, 1999; Mayer & Salovey, 1997). "Emotions can influence financial decisions in surprisingly predictable ways" (Sullivan, 2011, p. 4). Numerous studies have demonstrated how an individual with high emotional intelligence can enhance and increase the potential for positive outcomes (Cherniss, 1999).

#### Emotional Intelligence Defined

Emotional Intelligence (EI) was first used in an English doctoral dissertation in 1983 (Payne, 1983/1986). The term was actually derived prior though in 1966 by B Leuner in a German article titled "Emotional Intelligence and Emancipation" (translated) to describe women who, because of perceived low Emotional Intelligence, rejected their social roles (Leuner, 1966). Salovey and Mayer (1990) further developed the concept. Emotional Intelligence is the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them (Mayer et al., 1999). The ability to recognize the meanings of emotions and relationships, in addition to reasoning and problem solving on the basis of these emotions is at the core of EI (Mayer et al., 1999). A four-branch model was designed by Mayer, Caruso, and Salovey (Figure 1).

Figure 1: The Emotional Intelligence Four-Branch Model.



To understand EI, one must understand the components that form the basis of EI. Psychologists recognize the mind (or brain) as having three distinct divisions; cognition (thought), affect (which includes emotion), and motivation (Mayer & Salovey, 1997). The first area of the brain is cognition, which refers to memory, reasoning, judgment, and abstract thought. Intelligence is measured here, reflecting the ability to combine and separate concepts, judge and reason, and the ability to engage in abstract thought (Mayer & Salovey, 1997). The second area of the brain is the affective area of the mind represented by emotions including the actual emotions (anger, happiness, fear, etc.), moods, evaluations, and other states of feeling, including physical states such as being tired or energetic (Mayer & Salovey, 1997). Both heredity and learned behavior play a role in establishment and development of the individual components of cognitive and affective spheres of the brain (Mayer & Salovey, 1997). The third area of the brain is motivation. Mayer and Salovey (1997) described motivation as the biological urges or learned goal-seeking behaviors. Motivation is considered to be a secondary factor in comparison with the other components of cognition and affect with regard to EI (Mayer & Salovey, 1997).

Realizing all three components may be a part of genetics in addition to learned behavior provides for a myriad of different attitudes and intelligence. The ability to understand a concept or learn something new may be easier for one individual than for another. In the same manner, one individual may consistently be in an upbeat mood, full of energy, whereas another person may show negative emotions in addition to lacking in motivation on a consistent basis. Being able to recognize these in oneself and in others, and the ability to manage or improve these components in both one's own makeup and that of others is representative of EI. Tests are available to actually determine the level of EI an individual possesses. In the 1980s, Dr. Reuven Bar-On produced an assessment tool known as Emotional Quotient Inventory (EQ-i) to provide a quantitative measure of EI (Colfax, Rivera, & Perez, 2010). This provided a better understanding of the components making up EI measuring fifteen elements on an individual basis,

grouped into five major composites. Since then, the assessment tool has been updated to  $EQ-i^2$ , building on the basis of EQ-I (Ferraro, 2012).

#### Why Emotional Intelligence Is Important

Emotional Intelligence is essential to effectiveness in the work force. "Emotional intelligence is your ability to recognize and understand emotions in yourself and others, and your ability to use this awareness to manage your behavior and relationships" (Paterson, 2011, p. 80). Since the awareness of Daniel Goleman's research on emotional intelligence, the willingness to look at emotional awareness has turned into a positive benefit for both individuals and organizations. "Goleman compared star performers with average ones in senior leadership, nearly 90% of the difference in their profiles was attributable to emotional intelligence skills rather than their cognitive capabilities or technical skills" (Paterson, 2011, p. 80). Numerous academic studies provide empirical evidence that improvements in EI are highly correlated with increased performance in both learning and in the workplace. Studies in both Affective Neuroscience and Biobehavioral Science demonstrate "some of the most impressive evidence for brain plasticity is emotional learning" (Davidson, Jackson, & Kalin, 2000, p. 890). In effect, with proper training one can rewire and reshape the emotional circuitry of one's brain to maximize emotional performance. Bradberry and Greaves (2009) indicated that EI is "so critical to success that it accounts for 58% of performance in all types of jobs" and "is the single biggest predictor of performance in the workplace and the strongest driver of leadership and personal excellence" (p. 20).

Businesses and governments are now in agreement with Oscar Wilde who said, "I don't want to be at the mercy of my emotions. I want to use them, to enjoy them, and to dominate them" (Wilde, 2007, p. 228). Oscar Wilde recognized the power of emotions in his classic, *The Picture of Dorian Gray*. The United States Air Force used the EQ-i test by Bar-on to select recruiters and increased their ability to predict successful recruiters by nearly three-fold, with an immediate savings of \$3 million annually (Cherniss, 1999). Cherniss (1999) offered 19 unique examples in business (with the Air Force being one example) demonstrating the significant effect EI had within an organization.

#### Empathy And The Financial Planner

Empathy is the ability to reflect on one's situation and feelings, and to show that you care. Goleman stated, "If your emotional abilities aren't in hand, if you don't have self-awareness, if you are not able to manage your distressing emotions, if you can't have empathy and have effective relationships, then no matter how smart you are, you are not going to get very far" (Hughes, 2004). The effective financial planner has the ability to demonstrate empathy through empathetic communication (Fishman, 2011). "Empathic mirroring is the ability to take in what other people are saying and feeling and then communicate that you have internalized their thoughts and feelings" (Fishman, 2011, p. 26). An example is when a manager says to a subordinate "I can see you are angry." Empathetic mirroring acknowledges the right to feel how the subordinate feels, although it does not communicate approval of the action (McCabe, 2011).

#### Emotional Intelligence And Mediation

Emotional Intelligence, remarkably, has not been a major component in mediation training and practice. An environment whereby two opposing sides meet, more often than not with attorneys by their sides, to negotiate some form of agreement with an impartial, non-judgmental third-party to preside and act as negotiator between the parties creates a environment in which a broad range of emotions are normally exhibited. The discussion regarding lack of emotional recognition in mediation has been ongoing for some time. "It seems ironic that conflict, which is among the most emotion-arousing of phenomena, has been predominantly studied as though those emotions had no bearing on it" (Thomas, 1992, p. 702).

Jones and Bodtker (2001) stated four assumptions that support the use of EI in Mediation. The first assumption is that "emotion is the foundation of all conflict" (Jones & Bodtker, 2001, p. 219). The second assumption is that emotion is central in all mediation context. The third assumption is that to be maximally effective, mediators must focus on three key components of emotion in the mediation; expressive, physiological, and cognitive. The final assumption is recognition of the mediator's role in attending to the emotional experience of both the mediator themselves in addition to the disputants in order to fully understand the implications of emotion during the mediation (Jones & Bodtker, 2001).

Lund contended that mediators need training and preparation in order to manage their emotions. Lund proposed four methods for preparing: 1) Avoid being overwhelmed when emotion is expressed, 2) Deal with their own emotional reactions to disputant's emotions, 3) Increase sensitivity and detach themselves from the situation, and 4) Promote a realistic understanding of results (Lund, 2000).

#### Emotional Intelligence And The Financial Planner

Approximately 25% of the time a Financial Planner is dealing with non-planning issues such as "human drama and frailties" (Sussman & Dubofsky, 2009, p. 48). Although, EI has been correlated to increasing the business of financial planning, the emphasis for effective financial planning should be on how to increase positive relationships (Darwish, 2008). Sussman and Dubofsky (2009) and Darwish (2008) provided information that supports the need for EI training in the Financial Planning field. A client that shares his or her personal financial information, goals and dreams, may be confiding in their Financial Planner more than they would his or her doctor, priest, or therapist. Any number of financial items may trigger an emotional response from the client. The issues of providing for survivors on one's death, the subject of divorce, or sheltering or hiding assets from a family member, the possibility of outliving one's assets, or concern about an investment loss, all of these may trigger a display of emotional volatility.

Seventy-four percent of planners had experienced a meeting in which a client became emotionally distraught (Sussman & Dubofsky, 2009). Sussman and Dubofsky (2009) determined that 40% of respondents had no training or coursework of any kind in regard to non-financial coaching or counseling. Forty-eight percent of respondents had mediated (informally) marital discord with another 44% mediating parent-child issues (Sussman & Dubofsky, 2009). Additionally, 34% of the planners in the survey were asked by a client if they should seek a divorce (Sussman & Dubofsky, 2009). From the results of the Sussman and Dubofsky study, EI should be considered when preparing a Financial Planner for Mediation.

For Certified Financial Planner<sup>TM</sup> practitioners, Principle 3 in the Code of Ethics states that a practitioner must maintain the knowledge and skills necessary to provide professional services competently. Competence also includes the wisdom to recognize the limitations of that knowledge and referring to another professional when necessary. As practitioners dealing with emotional issues, Financial Planners are not psychology experts nor should Financial Planners refer every client to such. Emotional recognition of the client plays a crucial role in understanding the client's motivation and feelings about

his or her finances. One interpretation of Principle 3 is the practitioner should consider increasing their EI to be competent in dealing with clients.

#### METHODS FOR INCREASING EMOTIONAL INTELLIGENCE

Bradberry and Greaves (2009) stated that one's professional success would improve if one can improve his or her emotional intelligence. "EQ is so critical to success that it accounts for 58 percent of performance in all types of jobs. It is the single biggest predictor of performance in the workplace and the strongest driver of leadership and personal excellence" (Bradberry & Greaves, 2009, pp. 20-21). People with higher EQs make more money too (Bradberry & Greaves, 2009). Finley (2008) created five techniques to increase your emotional intelligence. Based on Goleman for emotional and social competencies, Finley presented the following items for improvement:

- 1. Emotional self-awareness
- 2. Emotional management
- 3. Self-motivation
- 4. Highly empathetic
- 5. Relationships under management

The best method is to approach this one step at a time. Many EQ assessments exist on the Internet. A free assessment is provided by Institute for Health and Human Potential (IHHP) at http://www.ihhp.com/?page=freeEQquiz. You can answer a few basic questions, select submit, and then a response appears (see Figure 2).

Figure 2: Sample EQ results from IHHP Free Quiz

Τε	Test Your EQ Quiz Score					
	Your Results:					
	25 - 34: People in this range often find themselve their co-workers, even their loved ones. They seer 'buffer' for dealing with change, stress and difficu also report depression or feeling 'lost' in life. Are 'winds' of change to direct you - instead of setting course using an internal compass? Are you respor its challenges with fear and insecurity rather than purpose? Emotional intelligence can be learned ar with big payoffs! Studies of entrepreneurs and en	n to have less lty. Some people you allowing the g your own ding to life and passion and nd improved -				

The next step is to select one skill at a time to work on. Evaluate what areas you may be weakest in. Perhaps start there. Most importantly seek a mentor to help you with this process. Breaking down Finley's techniques for Emotional Intelligence provides basic instructions that an individual may take advantage of to increase one's EI (Finley, 2008, pp. 20-21). Emotional self-awareness is the ability to be in touch with one's emotions. An emotionally aware individual is aware of his or her emotional state at any given time and understands when his or her feelings change and the impetus behind it.

Even if one has a command of self-awareness, he or she must also be able to self-monitor his or her emotions. This ability of emotional management allows one to manage expressive control appropriate to the situation (Gangestad & Snyder, 2000). Self-awareness and emotional management both tend to vary widely based on an individual's emotional makeup and the environment he or she was raised in. An example of emotional management is one individual reacting automatically to a situation, whereas a second person may not react but respond to the situation by choosing the appropriate response. The first individual has no control of the situation because of an automatic reaction whereas the second individual chooses the most appropriate response, and in effect, controls their response to the situation. Goleman strongly believes that meditation, not to be confused with mediation, is a way to increase self-awareness. It is interesting to note Goleman's doctoral dissertation at Harvard was on the topic of meditation; in addition he has published extensive research on meditation. Bowling and Hoffman (2000) also suggested some individuals develop greater self-awareness through yoga, meditation, or religious disciplines.

#### **CONCLUDING COMMENTS**

EI skills are equally important to a financial planner functioning as a financial specialist in support of mediation or as a planner in a financial planning session. More recognition needs to be given to the importance of EI and the impact it has on the outcome of either a mediation or financial planning session. The underlying commonality that these proceedings share is the strong emotions regarding one's personal finances. Both mediation and financial planning demand the professional be credible and empathetic toward the client. These traits can be conveyed by an individual with a high degree of Emotional Intelligence. For a financial planner or mediator then it is imperative to understand the role of EI in his or her practice and what one can do to increase his or her Emotional Intelligence.

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### ACCOUNTING AND FINANCIAL REPORTING SYSTEM REFORMATION IN BELARUS

Tatsiana Rybak, Ministry of Finance of the Republic of Belarus

#### ABSTRACT

The development of participation of the Republic of Belarus in the global economic integration gives raise to new problems of the national accounting and financial reporting system to be solved. The conceptual framework of that system development is determined in the draft Accounting and Financial Reporting Act. The author worked out recommendations on organizational, methodological, methodical and human resources management support for the process of the Belarusian accounting and financial reporting laws harmonization with the International Financial Reporting Standards.

#### **JEL**: M410

**KEYWORDS**: globalization, integration, Belarusian accounting and financial reporting laws, International Financial Reporting Standards application infrastructure.

#### INTRODUCTION

Belarus is involved in national accounting and financial reporting system harmonization with International Financial Reporting Standards ("IFRS"). Focusing on IFRS is called forth by the economic globalization tendency, as well as by strong necessity for the country's full-scale integration to the global economic environment. The basic concepts of the national accounting and financial reporting system development are determined in the draft Accounting and Financial Reporting Act ("Act"), the first revision of which was adopted by the House of Representatives of the Belarusian National Assembly.

Creation of proper IFRS application infrastructure and institutional framework perfection might contribute to most efficient realization of the drafted system measures, which are aimed at adequate information environment to be implemented to follow the global business tendencies and processes and meet the utmost demands of the concerned users.

# **REGULATORY FOUNDATIONS FOR HIGH-QUALITY FINANCIAL REPORTING IN BELARUS**

The draft Act implemented the provisions of the Belarusian President's Directive No. 4 dated 31/12/2010 related to business initiative development and business promotion in Belarus, particularly stipulating IFRS integration in the accounting process and taking into consideration the laws of the Customs Union member countries. Within the framework of the regional integration, in December 2010 the Republic of Belarus ratified the Agreement on Free Capital Flow and Financial Trade Promotion and Agreement on Trade in Services and Investments between the Common Free Market Zone member countries. The Republic of Belarus committed to apply the harmonization requirements in conformity with the IFRS.

When developing the draft Act, a number of alternative considerations and suggestions have been analyzed for further development of the national accounting system. This resulted in two major streams to be followed, i.e.:

IFRS-harmonized mandatory consolidated financial reporting to be made by all parent companies of social responsibility, e.g. banks, public corporations, insurance companies; Belarusian accounting and financial reporting system development, taking into consideration the IFRS provisions. The draft Act

further stipulates for legislative initiative of IFRS implementation to be advanced. IFRS application procedure shall be determined by the Council of Ministers of the Republic of Belarus in cooperation with the National Bank of the Republic of Belarus.

For more efficient IFRS implementation, it is proposed to advance more stringent requirements to performance of socially responsible companies' chief accountants, since their professional background dominates users' confidence in financial reporting, risk assessment for investors. The draft Act stipulates for specific attestation of pretenders to the socially responsible company's chief accountant qualification. The Chartered Accountant certificates will be issued by the Ministry of Finance of the Republic of Belarus, following the successful attestation.

The draft Act provides the basis for the national accounting and financial reporting system qualitative development, focusing on reliable reporting, being user-friendly and adaptable for proper business decision-making, rather than on mere accounting process. For this purpose, the draft Act integrates the accounting and financial reporting principles (accrual, understandability, relevance, comparability, veracity, etc.) and implements a new type of regulation – national financial reporting standard.

The national financial reporting standard system would incorporate the national standards in accounting policy, accounting of assets, liabilities, income, expenses, additional explanatory information, consolidation, accounting of specific business types. The complete set of financial statements, as stipulated by the draft Act, embodies balance sheet, profit and loss statement, changes in equity statement, cash flows statement, explanatory notes. The draft Act stipulates general provisions of reporting process assessment. New assessment methods and revised approach to exchange difference reporting have been further introduced.

The draft Act provides for simpler reporting of business transactions. Any primary instrument templates (other than those mandatory by law) may be developed and approved by each company management independently. Systematic measures related to accounting and financial reporting system, as stipulated by the draft Act, aim at providing top reliability and comparability of financial information, as reported in different branches of economy.

# INSTITUTIONAL FOUNDATIONS FOR HIGH-QUALITY FINANCIAL REPORTING IN BELARUS

When ratified, the new Accounting and Financial Reporting Act might require a set of related measures and decisions to be taken and effected for proper IFRS implementation in the Republic of Belarus. Let's point out the major problems to be solved.

The Belarusian accounting community has not been represented and involved in decision-making and elaboration process of international standards. This makes infeasible to react promptly and revise the national standards to comply with IFRS, as changing from time to time. This problem may be solved by closer cooperation with IFRS Committee and International Federation of Accountants and by giving way for the national policy to be announced during the international standards development and perfection process.

The Ministry of Finance of the Republic of Belarus cooperates with IFRS Foundation and World Bank experts in this concern. The Ministry of Finance is represented continuously with the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) of United Nations Conference on Trade and Development, as well as with the CIS Coordination Council on Accounting.

Belarus currently organizes the IFRS texts to be available in the national language. Presently, the Ministry of Finance of the Republic of Belarus deals with legal and organizational issues of agreement with IFRS Foundation for the waiver of copyright within limited territories. As far as IFRS interpretation is concerned, foreign practice demonstrates certain distortions in translated standards to be often found, inasmuch as some definitions trend to be missing in certain jurisdictions, and no adequate terminology is available. Moreover, reference to Prof. Y. Sokolov, "the major translation problems relate to proper understanding of ideological and lexicological aspects of evident and correctly translated definitions, rather than from linguistic inadequacy" (Sokolov, 2007). The problem of proper understanding of IFRS terminology is expected to be solved by specific glossary compilation and publication.

IFRS application would require a public compliance supervision system to be organized. For this purpose, a specific supervising authority should be created, as practiced in other countries, for example, German Federal Financial Supervision Authority, Financial Reporting Council in the United Kingdom, Financial Services Authority of France (Krylova, 2008). Many countries with transitional economies involved similar measures. Thus, Pakistan organized its Compliance Monitoring Section of the Securities and Exchange Commission, Turkey – Capital Markets Board (Krylova, 2008), Kazakhstan – Agency on Regulation and Supervision of the Financial Market and Financial Organizations (Duisebek, 2008). Some countries delegate the IFRS compliance control functions to stock exchanges. Thus, the Admission Division and the Sanction Commission of the SWX Swiss Exchange apply penalty to bond issuers in case of failure to comply with the financial reporting requirements (Review of practical implementation issues relating to IFRS, 2008).

IFRS-harmonized mandatory consolidated financial reporting having been introduced, stronger requirements to audit will be implemented for such reporting reliability verification. Pursuant to the draft Audit Act, the first revision of which was adopted by the House of Representatives of the Belarusian National Assembly, IFRS-based consolidated financial reporting of socially responsible companies shall be subject to mandatory audit. Audit companies dealing with such audit shall comply with extra requirements of having at least two staff auditors qualified under IFRS and International Audit Standards. For external audit quality verification, national auditors' associations are to be engaged.

Also, economic education sets forth major problems to be solved for the Belarusian accounting and financial reporting system reformation. No centralized system for IFRS education and advanced training is currently organized in Belarus. Short-term seminars and training courses realized from time to time by audit and advisory companies fail to benefit to the problem solution. For these purposes, a wide-scale program of accounting practitioners' advanced training is planned to be implemented.

The accounting and financial reporting system reformation would require a set of measures to be enforced for vocational accounting education perfection, i.e.: revision of higher and secondary vocational curriculums, focusing on IFRS advanced training and their practical application, publication of appropriate tutorials and teaching aids, re-training of lecturers, etc.

#### CONCLUSION

As a summary, the following measures related to organizational, methodical, methodological and human resources aspects to develop the Belarusian laws on accounting and financial reporting are obvious to be implemented, i.e.:

Organizational measures - cooperation with IFRS Committee and realization of the Belarusian representation for joint solving of problems related to the national accounting and financial reporting laws harmonization with IFRS; organization of IFRS texts to be continuously available in the national

language and freely accessible to the accounting community; creation of public IFRS compliance supervision system;

Methodological support – legislative requirement of IFRS application in Belarus, stipulation of accounting and financial reporting principles, new approaches to recognition, classification and assessment of reporting elements;

Methodical support – creation of a IFRS-integrated system of national accounting and financial reporting standards;

Human resources management – perfection of the existing system of accounting practitioners' training, as well as advanced training of company managers, auditors, economists, financiers.

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### USING OPTION-IMPLIED VOLATILITY TO PREDICT EARNINGS SURPRISES IN THE STOCKS OF THE DOW JONES INDUSTRIAL AVERAGE

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#### ABSTRACT

In this paper, I investigate the effectiveness of option-implied volatility as a short-term predictor of earnings surprises in the 30 stocks of the Dow Jones Industrial Average. For each quarterly earnings release by the 30 DJIA firms during the period 2007Q1 through 2008Q1, I compute the implied volatility of each near-the-money put- and call- option trade occurring in the 30 days leading up to the announcement. To minimize the error in the implied volatility calculation, IV is computed based on actual CBOE option transaction records, and intraday stock price observations. By analyzing trends in the difference between put- and call-implied volatility, I investigate whether information contained in the put-call implied volatility spread can be used to predict future shocks.

JEL: G12, G14

**KEYWORDS:** Dow, Option Pricing, Implied Volatility, Informational Efficiency

#### **INTRODUCTION**

There exists a large and growing literature studying the effect of corporate earnings announcements on stock prices and trading volumes. Ball and Brown (1968), Aharony and Swary (1980), Datta and Dhillon (1993), and Kothari, Lewellen, and Warner (2006) are examples of studies that investigate the absorption of new earnings information into stock and bond prices. Less work has been done, though, examining the effect of this new information into equity option prices and trading patterns. The relative dearth of studies of this nature is somewhat surprising, given the potential impact of the findings, particularly as they relate to informed trading in options. Black (1975) was the first to suggest that informed traders will be attracted to the options market, due to the higher degree of leverage that can be employed. Since then, several authors have documented trading patterns that are consistent with this notion. One such example is Arnold, Erwin, Nail, and Nixon (2006), which documents a significant shift in trading volume from stock to options markets prior to cash tender offer announcements.

A central issue that must be addressed is whether or not new information (such as earnings surprises) should be reflected in option prices. According to the Black-Scholes option pricing model, the only unknown factor affecting an option's price is the expected volatility of the underlying stock. If this is the case, when there is no clear connection between the introduction of new information (such as an earnings surprise) and expected future volatility, there is no predictable response of the option price to the new information. Fortunately (for the purposes of this study), several authors have documented that option prices do not conform quite so strictly to the assumptions of the Black-Scholes model. Canina and Figlewski (1993) report that, in the case of OEX index options, implied volatilities are not good predictors of realized volatility. Their interpretation is that "an option's market price also impounds the net effect of the many factors that influence option supply and demand but are not in the option model." In other words, it seems that in their sample, option prices do in fact reflect the effect of new information. Their analysis does not, however, attempt to make the connection between information releases and option price effects. Their results are somewhat contradicted by those of Mayhew and Stivers (2003), who compare the effectiveness of implied volatility to various conditional heteroskedasticity models in predicting future

realized volatility. They report that "implied volatility subsumes nearly all information about future firm volatility"; however, they do not address the issue of information shocks.

Donders, Kouwenberg, and Vorst (2000) accept the premises that (a) option prices can be affected by factors such as supply and demand imbalances, and (b) that since implied volatility is positively correlated with option price, it can be used as a measure of "relative" option price. In that light, they study the effect of earnings announcements on option volume, open interest, and implied volatility. Their analysis, based on a sample of 40 options traded on the Amsterdam AEX Options Exchange, documents a significant runup in implied volatility for both calls and puts in the days leading up to the earnings announcement, but does not explore the possibility of asymmetric effects between them.

Xing, Zhang, and Zhao (2010) document a relationship between the "volatility skew", and subsequent equity returns. Skew is defined as the difference between put- and call- implied volatilities, and the authors find that "firms with the steepest volatility skews underperform those with the least pronounced volatility skews." That is, firms whose put options are expensive relative to call options tend to underperform. Xing, et al. also document that firms with the steepest volatility skews experience the worst earnings shocks in the following months, which is consistent with the presence of informed trading. While Xing, Zhang, and Zhao contribute much to the literature, their analysis is somewhat limited by the use of end-of-day option prices. Because option prices are tightly bound to the value of the underlying stock, end-of-day option quotes may not incorporate the true contemporaneous value of the stock, particularly for less-heavily traded options. This potential mismatch may introduce error in the computation of implied volatility. In this study, I address this potential shortcoming by utilizing individual option transaction prices and intraday stock quotes (+/- 10 minutes) to compute IV.

#### **DATA AND METHODOLOGY**

Data for the study, including option trades and intraday stock quotes, were provided by www.opentick.com. In order to maintain a manageable sample size, and to ensure that sufficient option volume exists, I limit the analysis to the thirty stocks included in the Dow Jones Industrial Average. The first step in the analysis is to identify the dates and actual values of quarterly earnings announcements, from 2007Q2 to 2008Q2, inclusive. Again, the sample is limited by data availability, and in order to maintain a manageable size. Quarterly earnings, along with the high, low, and consensus analyst estimates are obtained from www.businessweek.com. For each of the earnings announcements (30 firms \* 5 quarters = 150 releases), I obtain from www.opentick.com intraday stock price data for the period -30 to +5 days relative to the announcement. Trading off temporal precision against data volume, I choose to use stock quotes with 10-minute intervals.

As of 30 days prior to each earnings release, I identify the two nearest-the-money (above and below) calls and puts for each firm. This results in an overall sample size of 600 option series (150 releases \* 4 options). For each of these option series, a record of individual option trades (including price, trade size, volume, and open interest) is retrieved from www.opentick.com. For each option trade occurring during the sample period, I compute the Black-Scholes implied volatility based on the actual trade price, actual time to expiration, and the closing price quote from the most recent 10-minute window. Given the shortterm nature of the options under consideration, the effect of varying interest rates on implied volatility would be quite small; consequently, I assume a fixed risk-free interest rate of 2% over the period for all calculations. Computations are carried out using the GBSVolatility function of the RMetrics package, inside the R statistical programming environment (Wuertz, et al 2008, R Development Core Team 2008). Dividends were ignored, which is justifiable given that it is unlikely for a dividend event to occur in the 30 days prior to an earnings announcement. Although incomplete at the time of this writing, the research thus far has turned up a few empirical regularities worthy of mention. First, it is clear that for most firms, option-implied volatility tends to be relatively stable over the period 4 weeks prior to the earnings announcement. There is not universally a runup in implied volatility prior to the earnings event, although such a phenomenon is apparent for several firms in the sample. Second, for most firms, put- and callimplied volatilities are very nearly equal, as would be expected in an informationally efficient marketplace. Again, there are exceptions, and in several cases a noticeable difference between put and call IVs emerges either shortly before or after the earnings announcement. The statistical significance of these exceptions, and the extent to which they are correlated with earnings surprises are not yet known, but will be presented in the completed version of this paper. Regardless of the results of this particular analysis, the techniques demonstrated in this study can be applied in other contexts, to analyze the effect of any sort of economic event or information shock on options markets.

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### A NEW KIND OF SOCIAL ENTREPRENEURSHIP! MAM CASE STUDY

Elizabeth Robles, University of Puerto Rico

#### ABSTRACT

How can a "doula", be the originator of such a creative business that combines a nonprofit organization with three profitable micro businesses and in addition, is a socially responsible organization? MAM meaning "mujeres ayudando a madres"/women helping mothers is a Puerto Rican nonprofit organization whose goal is to support women in the childbearing stage and to promote a constructive culture based on the physical and psychological health of the family. It was created by a midwife and a certified "doula", a trained labor support person, Mrs. Vanessa Caldari. MAM pursues the doula's philosophy of personal empowerment of the mother. The mission of MAM is "to promote the rights, the education and the wellbeing of women during their pregnancy. MAM's integrated hybrid model produces both social value and commercial revenue through a single, unified strategy.

KEYWORDS: social entrepreneurship, hybrid model, doula, MAM, social enterprise

#### **INTRODUCTION**

How can a "doula", be the originator of such a creative business that combines a nonprofit organization with three profitable micro businesses and in addition, is a socially responsible organization?

MAM meaning "mujeres ayudando a madres"/women helping mothers is a Puerto Rican nonprofit organization whose goal is to support women in the childbearing stage and to promote a constructive culture based on the physical and psychological health of the family. It was created by a midwife and a certified "doula", a trained labor support person, Mrs. Vanessa Caldari. Although Mrs. Caldari's educational background is in nursing, she is a perinatal educator who works as a midwife and a doula. Through her work she saw the need of many pregnant women to have education and support through their pregnancies, especially women of limited economic resources.

Mrs. Caldari founded MAM in 2007 with the purpose of empowering mothers in their pregnancies. Officially the MAM center was open to the public in the year 2010. The idea of having a center like MAM was born from the Sisterhood of Midwives of Puerto Rico (Hermandad de Parteras de Puerto Rico (HPPR) to which Mrs. Caldari belongs and represents the Latin American and Caribbean Network for the Humanization of Labor and Birth in Puerto Rico.

#### MAM'S FUNCTIONS

MAM pursues the doula's philosophy of personal empowerment of the mother. The mission of MAM is "to promote the rights, the education and the wellbeing of women during their pregnancy. The purpose is to empower women during their pregnancy stages and postpartum.

MAM creates awareness in the community about the proper management of health and physiology which has shown to reduce morbidity and mortality in pregnancy, childbirth and postpartum. In addition, MAM educates and promotes family planning and parenting.

MAM channels efforts to reduce the cesarean rate, to increase the percentage of mothers who breastfeed, to create better bonding between couples during the stage of motherhood, to lower the rate of

maltreatment of children with humanitarian teachings and warm, and to assist mothers in their reintegration into society after the childbirth.

MAM sees that by raising awareness, women make decisions that support their emotional, mental and physical health of their lives. This can prevent problems such as abuse, depression, and disease in women. MAM meets the need that the community of Puerto Rico has to achieve lower rates of unnecessary cesarean operations, increase lactation, lower the number of domestic violence, lower government dependency and support low-income single mothers.

MAM is an organization that promotes the rights of the pregnant woman. MAM wants that every woman be armed with the knowledge they need to have a healthy pregnancy, childbirth and postpartum, full of positive memories.

MAM as an organization aims to educate Puerto Rico's society to see that pregnancy has the potential to be an event that positively changes the life of a woman. MAM promotes the humane care of women during their maternity.

#### **RESEARCH ON DOULA'S BENEFITS**

Throughout the literature it has been found that doula support has repeatedly decreased the length of labor, the use of pain medication, the rates of cesarean sections, and instrumental births, and has increased rates of breastfeeding and bonding.

In their study Rohwer (2011) indicated that doula support increased teen mothers knowledge of the birth process, provided unbiased and nonjudgmental support and information, gave them confidence in their ability to give birth, and encouraged mothers to be proactive in communicating with their care providers. Doula care provides the following benefits: shorter labors, reduced need for pain medication, fewer episiotomies, fewer cesarean sections, fewer operative vaginal deliveries, better mother infant interaction, improved neonatal outcomes, improved breast feeding rates, and greater maternal satisfaction (Stein, Kennell and Fulcher (2004).

According to Mottl-Santiago et al (May 2008) a hospital-based doula support program is strongly related to improved breastfeeding outcomes in an urban, multicultural setting. In addition, having doula support was significantly related to: (a) higher rates of breastfeeding intent and early initiation rates for all women, regardless of parity or provider with the exception of multiparous women with physician providers; (b) lower rates of cesarean deliveries for primiparous (first birth) women with midwife providers.

In their study, Deitrick et al (2008) found that doulas provide four kinds of support, including physical comfort, physical assistance, socio emotional support, and verbal support. Campbell et al (Sep 2007) concluded in their study that labor support by a minimally trained female friend or relative, selected by the mother-to-be, enhances the postpartum well-being of nulliparous mothers and their infants, and is a low-cost alternative to professional doulas.

Gilliland (2011) found that doula care has the potential to enhance paternal involvement with labor support and increase satisfaction of fathers and mothers with their birth experience. In addition, it may have the potential to reduce a father's stress level during the birth experience by employing a variety of techniques, thus improving the quality of his experience.

Previous randomized controlled studies in several different settings demonstrated the positive effects of continuous labor support by an experienced woman (doula) for low-income women laboring without the

support of family members (McGrath and Kennell, 2008). McGrath and Kennell, (2008) concluded that the continuous presence of a doula during labor, significantly decreased the likelihood of cesarean delivery and reduced the need for epidural analgesia for middle-class women, laboring with the support of their male partner.

#### SOCIAL ENTREPRENEURSHIP

Makhlouf (2011) asserts that social entrepreneurship starts with an entrepreneur who has a novel idea, an innovative product or service, a creative approach to solving a perceived problem, a new business model, and/or a previously untried approach to product or service delivery.

According to Noruzi et al (2010) social entrepreneurship refers to innovative activity with a social objective in either the for-profit area, such as in social-purpose commercial ventures or in corporate social entrepreneurship. It could also be in the nonprofit sector, or across sectors, such as hybrid structural forms which mix for-profit and nonprofit approaches. A common denominator across all definitions of social entrepreneurship is the fact that the underlying drive for social entrepreneurship is to create social value, rather than personal and shareholder wealth.

A social entrepreneurship is characterized by innovation or the creation of something new, rather than simply the replication of existing enterprises or practices. The core driver for social entrepreneurship is the social problem being addressed. The particular organizational form a social enterprise takes should be a decision based on which format would most effectively mobilize the resources needed to address that problem (Noruzi et al, 2010). Social entrepreneurship is not defined by legal form, as it can be pursued through various vehicles. Examples of social entrepreneurship can be found within or can span the nonprofit, business, or governmental sectors.

Martin and Osberg (2007) defined three components that distinguished social entrepreneurship. These components are: (1) an ability to identify "a stable but inherently unjust equilibrium that causes exclusion, marginalization, or suffering of a segment of humanity", (2) an ability to identify an opportunity in this unjust equilibrium and develop a social value proposition, and (3) willingness to take action in order to forge "a new, stable equilibrium that releases rapped potential or alleviates the suffering of the targeted group. . .and even the society at large," (Martin and Osberg, 2007, p. 2).

#### MAM'S MODEL

MAM offers childbirth educational seminars, doula certification courses, and midwives certification courses. It has support groups for women that had lost a child, support groups for postpartum depression, breast feeding mothers and mothers with cesarean operations. In addition, it offers educational seminars of nutrition, health and parenting. MAM does not receive money from the government or the private sector, nor any grants. The funds are raised from the certificate courses and the seminars given at the center.

MAM has the structure of being a nonprofit organization that is the umbrella of three other profit micro businesses. These micro businesses are the ones who support MAM paying the rent of the organization. The first micro business is a vegetarian restaurant called Cocobana Café owned by a young couple, Mrs. Vanessa Díaz (also a doula and a former beneficiary) and her husband Mr. Manuel Collazo. The second micro business is called Natural Mama owned by Mrs. Jennifer Rodríguez, a former beneficiary of MAM. The third microbusiness is called Paperdolls owned by Mrs. Nacha Zurinaga, also a former beneficiary of MAM.

Originally, the clients of the three micro businesses were the beneficiaries of MAM services, pregnant mothers and mothers. Now their client base is changing, attracting additional market segments such as the local community and the general public. This is the case of Cocobana Café that although it is keeping MAM's beneficiaries, it is serving the general public from the local community. The mission of the restaurant is to provide healthy food to MAM's beneficiaries. Regarding Natural Mama, the products available are baby ring slings manufactured by Mrs. Rodríguez, reusable cloth diapers, homeopathic products, and some donated articles that are sold to single mothers at a reasonable low price. The donated baby clothing is given to single mothers and mothers with no economic resources. Paperdolls sells women's apparel and accessories. None of these entrepreneurs have a formal business background or studies. In fact, only Mrs. Díaz has a bachelor degree and is in education.

The synergy around this model is that it provides the flexibility to the three entrepreneurs, to have a job and to take care of their children while in the job. Their first job is to be mothers and take care of their children and then comes the business.

According to Battilana et al (2012) MAM's business model is called a hybrid business. This is a new business model created as a result of the recession. It is innovative in creating the resources needed to pay the bills and still has a social mission.

The hybrid model would use product sales to fund its social mission, reducing dependence on donations, grants, and subsidies, as well as to scale up the organization. MAM's integrated hybrid model produces both social value and commercial revenue through a single, unified strategy.

During the last five years the increase in the number of hybrids results in part from social entrepreneurs' willingness to be less dependent on donations and subsidies, as well as from an increased interest in creating sustainable financial models in the wake of the 2007-08 financial crises (Battilana, 2012). The leaders of hybrid businesses must make deliberate cultural decisions to keep the mission on course while still making enough money to sustain their operations (Battilana, 2012). They must identify and communicate organizational values that strike a healthy balance between commitment to both social mission and effective operations. In addition, the selection, development, and management of employees who are capable of recognizing and pursuing social and economic value are equally important.

#### MAM'S CHALLENGES

Social entrepreneurship is still emerging as an area for academic inquiry. Its theoretical underpinnings have not been adequately explored, and the need for contributions to theory and practice are pressing (Austin et al, 2006).

According to Makhlouf (2011) a social entrepreneurships such as MAM has to establish external relations as well as the kind of management and operational systems that would allow them to function as a viable enterprise. In addition, they have to build dedicated teams that believe in the mission, are committed to the cause, and have the skills needed to: (1) build and maintain strong relations with all the external stakeholders, (2) attract the resources required for the financial viability of the organization, and (3) assist in the development and implementation of strategic and operational plans. Those external stakeholders include: "constituents intended to benefit from the initiative (e.g. poor and marginalized people); (2) resource providers, who offer financial, technical, or political resources; (3) allies who help carry out programs; and (4) actors who are targets of programs or campaigns" (Makhlouf, 2011, p. 7).

MAM needs a well-organized structure in order to succeed in the long run. In addition, it needs a solid group of volunteers that stays in the organization for a long period of time. Actually it needs ample facilities to accommodate more clients/beneficiaries. The business women need to be trained in

management and business areas to be more effective with their selling and administrative strategies. Also, the center needs to implement promotional strategies in order to increase the clients/beneficiaries base.

For MAM much work lies ahead to continue creating social value, and maintaining it over time in a sustainable way. MAM is creating a path for others to replicate. Next year it will be created a MAM center in Colombia. All this is happening thanks to the idea of a "doula", a midwife, Mrs. Caldari, who has a social vision of empowering mothers in their pregnancies.

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#### BIOGRAPHY

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During 2012, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) wrote a number of papers extending guidance on practical implementation of Enterprise Risk Management (ERM) in organizations. In addition, the Professional Practices Framework has been revised to include more relevant information. These changes and discussions were largely in response to corporate governance concerns, that is that the Board of Directors and Officers of the firms are actively seeking new and better ways to create effective internal controls. Risk assessment leads to more effective internal controls because risk assessment is a proactive way of identifying the interaction and potential flaws of the components within the system.

In these 2012 COSO papers, Risk Assessment was discussed as a critical component of the ERM process. The new guidance is of particular interest to companies with informal risk management processes that are eager to demonstrate adequate internal controls through establishing a uniform framework of internal controls in their organizations through ERM. One development was an expansion of the risk assessment process flow diagram. The risk assessment process flow diagram breaks the system of ERM implementation into six steps. The six steps are to identify risk, develop assessment criteria, assess risk interactions, prioritize risks and respond to risk. Especially in the early stages of ERM implementation, the main focus of the system is on the four middle steps of the process. Developing risk assessment criteria is a process that is unique for each firm. By spending additional time thinking about proper risk assessment criteria, a proper tone is set for long range planning for the business. In assessing risk interactions, greater priority may be given to the risks that impact numerous factors of the business. This paper will critique the new guidance and suggest next steps for development.

## MCDONALDİZATİON FROM WEBER'S POİNT OF VİEW AND ITS REFLECTIONS İN TURKİSH SOCIETY

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#### ABSTRACT

We are all surrounded by a fast-food style of life in this era. We have less time and more work to do compared to our lives before. Moreover, there are more options to be consumped around us as a reflection of the painstaking acceleration of consumption culture. In such a world people need to hurry, to be practical and efficient enough in order to catch the phase of life. This paper is going to analyze this McDonalds restaurant type life style in general first and then to dig into the situation in Turkish society about this realm.

**JEL**: Z13

KEYWORDS: Fast-food restaurant, modernity, busy lives, Weber

#### **INTRODUCTION**

Today's modern world requires people who are able to do many things at one time. That is to say, people are so busy with the happenings of the daily life that they are not able to have seperate time for each of them. So, they need to do anything and everything fast which makes their life just as the ongoing work struggle in the McDonald's restaurants. According to Ritzer (1983), 'we have become a nation driven by concerns for rationality, speed, efficiency that are so well illustrated by the McDonald's style of operation. Food, packaging and service are designed to move quickly and cheaply through and out of these restaurants, giving customers the most modern experience.' Paralel to Weber's idea of bureaucracy in which he saw the society as the center of rationalization and the bureaucracy as its paradigm case, Ritzer argues that nowadays the model of rationalization is no longer bureaucracy but a fast-food restaurant. That is to say, in today's modern world what is rational is what is more efficient for this busy and stressful life style in which people are living in a kind of chaos and there is a lack of time for everything. So, life has became as a fast-food restaurant where you can have what you need at a low price and fast.

#### MAIN POINTS

In the fastfood world of today, Turkey is one of the countries which adopts this trend more and more everyday. The modern world teaches people how to live practically and efficiently which easies our lives. Since, it is much more different than our grandmother's time when there were not that much technology and people who are made obsessed with technology around.

According to Weber's ideal type of society, rationaliy of bureacracy is a main concept. What he means by rationality of bureaucracy is that; 'bureaucracy is a rational-legal form designed to promote the rationalization of organizational tasks and goals.' Ritzer (1983) states that 'the bureaucracy is largely a creation of the modem Western world. Though earlier societies had organizational structures, they were not nearly as effective as the bureaucracy. For example, in traditional societies, officials performed their tasks on the basis of a personal loyalty to their leader. These officials were subject to personal whim rather than impersonal rules. Their offices lacked clearly defined spheres of competence, there was no clear hierarchy of positions, and officials did not have to obtain technical training to gain a position. Ultimately, the bureaucracy differs from earlier methods of organizing work because it has a formal

structure that, among other things, allows for greater efficiency. Institutionalized rules and regulations lead.' So, in the bureacratic societies of today, there are fixed rules to obey and there is no place for being out of the norm. A citizen has to act not as a living thing but as a robot which is pre-programmed to live according to the norms and moreover if s/he happens to fail to do this, it will be almost impossible to live efficiently enough for today's standards.

After depicting a general view of what rationality in general is, one can say that in the course of world history, most of the societies has undergone a rationality process. But, Weber put forward a different kind of rationality which is called 'formal rationality'. What he means by that concept is that 'the search by people for the optimum means to a given end is shaped by rules, regulations, and larger social structures. Individuals are not left to their own devices in searching for the best means of attaining a given objective.' In other words, in today's formal rational world, there is no place left for exceptions or unpredictable ideas but there is a great struggle to obey these rules to eliminate all the unpredictable happenings which may deviate man from reaching the given aim. As a result of that view, it happens to the objectives since individual diversity is tried to be dead by all these rules. There is no living space for the gray in the formal rational world.

There are 5 major dimensions of rationalization which Weber names as the characteristics of a rational society. Efficiency, predictibality, calculability, substitution of nonhuman for human technology and control over uncertainty.

'Efficiency refers to 'the best optimum means to any given end.' (Ritzer, 1983) In today's world eating at home needs time and energy but people are out of these especially, at the end of a long and tiring day. So, eating out is the most efficient solution for them. About predictability, it talks about the similarity between most of the places and people in the society. That is to say, as a result of this globalization thing, everyone is becoming more and more similar every day. Since, people have a fast-food daily life, their life spaces are becoming the same, too. One can predict the daily life or home of a family in which father and mother works all day, just in the same way as they can predict the atmosphere and daily chores of a McDonalds restaurant. The third concept given is, calculability or quantity rather than quality which refers to giving much more value to the quantifiable measures which are easier to evaluate than the qualitative ones. This again is something that is suitable enough for the computer based fast food lifes of today's people. To calculate and identify qualitative measures, it takes lots of time and effort whereas to evaluate the quantifiable ones you donot need to give that much time. Instead, you can manage it in some minutes by the help of a computer on your desk. Another aspect of rationality is that, in recent rational societies nonhuman technology has substituted the human power. In other words, everything around has became such mechanic that we are living as if surrounded by plenty of robots. This again goes back to the life style of today's man, which is based on doing more work in less time and technological devices are the servants of mankind in this struggle. The fifth and last concept is the control over uncertanities. This refers to the elimination of any uncertanities by structeringa great control system over people. This concept is in a way related to the predictability one in the way that, in both of them there is an urge to close all the gates to surprises and controlling anything and everything that may happen unexpectedly since these unexpected occurences may prevent you from reaching to the given end.

Apart from all these five characteristics of rationalization stated above, there is one more concept that is very important in the Weberian understanding of this issue. He calls this 'iron cage of rationality'. In Weber's view, 'bureaucracies are cages in the sense that people are entrapped in them, their basic humanity denied. Weber feared most that these systems would grow more and more rational and that rational principles would come to dominate an accelerating number of sectors of society. Weber anticipated a society of people locked into a series of rational structures, who could move only from one rational system to another. Thus, people would move from rationalized educational institutions to

rationalized work places, from rationalized recreational settings to rationalized homes. Society would become nothing more than a seamless web of rationalized structures; there would be no escape.' Thus, Weber saw modern man ,who is seemingly much more free than the people of the pre-modern era, as deeply bounded to rules. So, this is nothing but the difference between appearance and reality. The feeling of freedom 'modern, rational' people have as a result of living in a high-tech society is only an illusion; in reality, they are slaves of modernity.

Paralel to that idea, in Turkish there is a saying as 'Even if you put a bird in a gold cage, it would long for its native land'. But, with one difference, here the animal is conscious of being entrapped and trying to find ways to run away. Whereas, in the case of modern man, he is not aware of this reality. The daily responsibilities of the 'formal rational' life prevents them from thinking about their being in an 'iron cage'.

#### **DISCUSSIONS ON TURKEY'S SITUATION**

If we look at how Weber's concept of rationality is reflected in Turkey, one can observe that, Turkey is a developing country which is trying to adapt itself to the trends of the modern world and in the course of this passage the aspects of rationalization are present in the modernizing Turkey, too. Although, it is not that harsh as in the western world, Turkish people are also undergoing a transformation into an efficient way of living. Everything around is programmed to be more efficient to the busy life style. Also, day by day people are becoming similar to each other as a result of following these rule of the rational society of today's Turkey. But, if it is compared to the western world, especially teh USA, Turkey is still not that 'rationalized.' As a reflection of its traditional formation and still conservative point of view. Turkish society is a long way behind the USA in terms of this issue. It is true that there is a change towards being more bureaucratic ,which means to be more rationalized according to Weber, but still it keeps its 'premodern' or 'pre-rationalized' structure. There are several indications of that such as; for Turkish people no matter how efficient is it eating out and fast is not something very pleasent since meals have a very valubale place in Turkish culture in terms of gathering people together and strengthening ties among them. In addition to that, Turkish people are not really used to obey the rules of bureaucracy since it is a common trend for Turkish man to decide at the last moment and as a result of that habit they are always ready for surprises and unpredictable happenings. Several examples like that can be observed in Turkish daily life.

#### CONCLUSION

In short, one can say that Turkey is not really 'Mcdonaldized' yet, and at the same time not 'formally rationalized' according to Weber's understanding of rationalization. But, the trend of today implies that Turkish society will also catch up its predeccors in the way of being more rationalized.

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### THE IMPACTS OF SINAPI ABA TRUST, A MICROFINANCE LENDING SCHEME ON ITS CLIENTS IN GHANA

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#### ABSTRACT

Owning to the success of the Grameen Bank and other microfinance institutions in recent years, microfinance institutions' role as a potential policy tool in poverty alleviation has received considerable attention. Empirical evidence from existing research shows some positive results in poverty reduction from some microfinance programmes. This paper intends to add to the existing literature on the industry by evaluating the effects of microfinance on clients who have received loans from the Sinapi Aba Trust of Ghana. Our data show that old clients have received greater impacts and are more empowered from the programme than new clients, even though the latter on average receive larger volumes of credit. In this study, we construct empowerment indicators, finding that years of membership duration with the SAT lending scheme matters in empowering clients. The results show that old clients are more likely to purchase assets, expand their businesses, and spend larger amounts on their children's education than new clients.

KEYWORDS: MFIs, credit, impact, assets, income

#### **INTRODUCTION**

Following the perceived success of the Grameen Bank and other microfinance institutions (MFIs) in recent years, the role of MFIs as a potential policy device for poverty reduction has increased in many countries around the world. Empirical evidence from existing research shows some positive results from some microfinance schemes (see for example Hashemi, et. al, 1996; Pitt and Khandker, 1998; Pitt et. al, 2006; and Maldonado and Gonzales-Vega, 2008). This study evaluates the impact made by SAT in lending to poor clients in urban communities in Ghana. Data was collected between July and September 2009 from clients of SAT we found clients to depict a spirit of entrepreneurship, they have been empowered in other areas. We used the cohort approached to classify clients into two groups: old and new clients. Old clients are defined as clients that had borrowed from the SAT more than three years and new clients as less than three years with the scheme. Data analysis show that even though new clients on average receive bigger loans, we find that old clients have benefited not only in income earned, but also increases in asset purchases and in expenditure on childrens' education. Furthermore, by constructing empowerment indicators from the survey instrument similar to Hashemi et. al, (1996); and Garikipati (2008), we found that old clients of the MFI have received greater impact than new clients. They have greater benefits in areas such as asset ownership, increased expenditure on food and children's' education, improvement in business operations, economically secure and in the overall empowerment.

The primary aim of this study, in taking the debate further, was to examine the impact of a microfinance institution that uses group-based lending to clients in Ghana. Findings of the study are consistent with findings of other studies on group-based lending programmes (see, for example Pitt and Khandker, 1998; Pitt et al., 2003; Pitt et al., 2006; Maldonado and Gonzales-Vega, 2008; Amin et al., 2003; and Coleman, 2006). This study has been organized into five sections. The next section reviews relevant literature on the group lending methodology. We then details the data used for the study. Empirical results are discussed in the next session. Concluding remarks are ventured in the last.

#### LITERATURE REVIEW ON IMPACTS OF MFIS LENDING

In this session we briefly outline some of the finding of studies on group lending approach. The group lending approach that facilitate the provision of credit to the informal sector have proved to be efficient, lower transaction costs; and much lower default rates compared to classical banking. There abound impressive theoretical and empirical literature supporting peer lending in Stiglitz (1990), Armendáriz de Aghion and Gollier (2000), Armendáriz de Aghion and Morduch (2005); Bhole and Ogden (2010). See Pitt and Khandker (1998), Morduch (1999), Pitt et. al (2006) for findings on employment and regular income among MFI clients. Using data collected in 2000 for CRECER scheme, and 2001 for the Batallas scheme, Maldonado and Gonzales-Vega (2008) found that rural household microfinance clients who received credit for more than a year were more likely to keep their children in school than clients who had just joined the programme.

#### THE DESCRIPTION OF DATA

Field work for this study was undertaken in Ghana from July to September 2009 via interviews with 672 SAT borrowers from three of its branches — in Abeka, Tema and Kasoa. Clients were randomly selected during community meetings at several centres of the branches. However, in some centres, clients attended meetings at irregular intervals, so a systematic sampling method (every third client) was used. The gender composition of clients in the data is 87 percent female and 13 percent male. Finally, selection bias is a major problem that researchers encounter in impact assessment of microfinance schemes. We deal with selection bias similar to Maldonado and Gonzales-Vega (2008) by using the cohort approach.

#### DESCRIPTION OF VARIABLES AND EMPIRICAL RESULTS

This section investigates the impact of credit on clients using the logit model. More specifically, we construct empowerment indicators to evaluate the impact(s) of the programme on the clients. We used the logit model to estimate the effects of independent variables on the dependent variables, namely empowerment indicators and the composite empowerment. These indicators have been designed similar to the indicators used by Hashemi et. al (1996); and Garikipati (2008). There are four indicators for empowerment — namely asset ownership, expenditure on children education, improvement in business operation and being economically secured for the future. We then aggregate them to get the composite empowerment indicator.

Following Hashemi et. al (1996) and Garikipati (2008), we assigned equal weights to each component if a client satisfies a set of selected conditions; this was intended to minimize the issue of subjectivity. The outcome variables employed in our data for empowerment were reduced to dichotomous variables (a score of zero or one) for the analysis. This allowed us to use the logit regression model for our estimates (see Amemiya, 1981; Hosmer and Lemeshow, 2000). We made a cutoff point for the variables around the 25th to 35th percentile; this helped to avoid the problem of extreme outliers (Hashemi et. al, 1996; and Garikipati, 2008). We describe the variables below.

Dependent Variables: Empowerment Indicators

*a-Asset Ownership (ASSETS):* The definition of assets here includes property of any form that a borrower purchased after he or she joined the scheme. Clients who have purchased assets of any form were coded 1 and 0 otherwise.

*b-Improvements in Business (IMPBUS):* Clients who use the purchased asset for business purposes were coded 1, and 0 otherwise.

c-Expenditure on education (EDUEXP): Another indicator we used is expenditure on childrens' education. We grouped schooling years into three: basic school; secondary school; and tertiary education, with the questions capturing expenditure on each education type. At the time of the survey, though public basic school had no tuition fee and required relatively small expenditures, most parents

with adequate funding prefer to send their wards to private schools for better performance. A score of 1 was awarded a client with expenditure on education otherwise 0.

d) *Economic Security in Future* (ECOSEC): Respondents rated their i) economic security and ii) future prospect on a five point scale from very high (1), high (2) to very low (5) before and after they borrowed from SAT. If economic security became better after they joined the scheme (a score of 1 or 2), compared to a pre-scheme membership situation (a score of 3, 4 or 5), then 1 point was awarded otherwise 0. We used the same criterion to award points to the clients. A respondent with a total score of three out of the five items was coded 1, and otherwise 0.

e) *Composite empowerment* (EMPOWER): A client was classified as empowered and coded 1, if for all the (4 indicators here) he or she has a score of 3 or 4 and 0 otherwise. Independent Variables

We used three different types of independent variables in the regression model: loan variables; client's household characteristics; and individual personal characteristics. The last two sets are control variables; they are included because such characteristics are likely to influence the empowerment indicators (Garikipati, 2008).

#### Programme Variables

a) *Number of years with SAT* (SATDUR): Clients who have borrowed for over three years were classified as 'old clients', and those with less than three years as 'new clients'. 'Old clients' were coded 1, and 0 otherwise.

b) Average loan size received by a client (AVLOAN): Clients average loan received was computed by dividing total loan received by number of loan(s), another independent variable.

c) *Before SAT loan* (LBSAT): Clients who took loans from other sources before they joined the programme were coded 1, and 0 other wise.

- 2) Household Characteristics
- 1) Head of household gender (SEXHH): Female household heads were coded 1 otherwise 0.
- 2) *Household size* (HSIZE): The size of the household.
- 3) Respondent's Characteristics
- 1) Respondent's age (RESAGE): The age of the respondent.

2) *Respondent's education* (RESEDU): We coded respondents' education as a categorical variable. It takes the value of 1, 2, 3 and 4 (where 1 represents no schooling years, 2 represents basic schooling of up to 10 years, 3 symbolizes secondary schooling, between 10 to 13 years, and 4 corresponds to tertiary education, over 13 years of schooling).

#### **EMPIRICAL RESULTS: EFFECTS OF CREDIT ON THE EMPOWERMENT INDICATORS**

Table 1 presents the effects of the independent variables on the indicators; it reports the odds ratios, and the confidence intervals for the odds ratios. Each dependent variable estimates a separate equation.

Generally, when an odds ratio of an independent variable is greater than 1, it shows a positive relationship with the dependent variable. In contrast, an odds ratio less than 1 shows a negative relationship between the variables. Statistical significance (p < 0.05) is shown when 1 falls outside the confidence interval of the variable (Hashemi et. al, 1996).

Table 1: Effect of the Independent variables on the Empowerment Indicator, reporting odds ratio and 95 % confidence intervals from logistic regression model

	Depende	ent variables				
Independent	ASSET		EDEXP		IMPBU	S
Variables	Odds	95%	Odds	95%	Odds	95%
	ratio	$C.I^*$	ratio	$C.I^*$	ratio	$C.I^*$
Satdur	5.1882	(3.2777, 8.2124)	2.4307	(1.5417, 3.8324)	3.4419	(2.2189,
						5.3389)
Avloan	1.0008	(1.0002, 1.0014)	1.0005	(0.9999, 1.0011)	1.0005	(1.0000,
						1.0011)
Lbsat	1.1705	(0.7838, 1.7479)	0.6274	(0.4129, 0.9535)	1.0572	(0.6849,
						1.6322)
Sexhh	0.6338	(0.4205, 0.9553)	3.0670	(2.0055, 4.6996)	0.8310	(0.5355,
						1.2894)
Hsize	0.9119	(0.8161, 1.0119)	1.6290	(1.4417, 1.8405)	0.9625	(0.8537,
						1.0852)
Resage	0.9527	(0.9311, 0.9748)	0.9701	(0.9481, 0.9927)	0.9644	(0.9407,
						0.9888)
Resedu	1.0791	(0.8657, 1.3451)	0.9678	(0.7761, 1.2069)	1.2988	(1.0152,
						1.6617)

	Dependent	variables		
Independent	ECOSEF		EMPOWER	
Variables	Odds	95%	Odds	95%
	ratio	C.I*	Ratio	C.I*
Satdur	0.5652	(0.3438, 0.9293)	3.3640	(2.1854, 5.1789)
Avloan	1.0009	(1.0001, 1.0017)	1.0072	(1.0002, 1.0013)
Lbsat	0.0841	(0.0519, 0.1361)	1.0340	(0.6717, 1.5917)
Sexhh	0.5013	(0.3195, 0.7867)	0.7344	(0.4753, 1.1350)
Hsize	0.8892	(0.7835, 1.0092)	1.0181	(0.9069, 1.1430)
Resage	1.0085	(0.9829, 1.0349)	0.9720	(0.9487, 0.9960)
Resedu	0.9532	(0.7397, 1.2285)	1.1944	(0.9425, 1.5136)

\* Confidence intervals

Statistical significance (p < 0.05) is shown when 1 falls outside the confidence intervals.

#### Assets Ownership (Assets)

The odds ratio for membership duration (Satdur) is 5.19 and it is statistically significant. This suggests that 'old clients' are 5.19 times more likely greater to own assets than 'new clients' in the sample. This result is similar to most findings in the literature where microfinance clients increase their asset ownership over the years (see Pitt and Khandker, 1998; Hashemi et. al, 1996; and Garikipati, 2008). It shows that old members of the scheme are 5.19 times more empowered in terms of assets ownership than new members, hence the longer the years a client borrows from the scheme, the more assets the client is likely to purchase. Again, the odds ratio of average loan received is 1.00082, and it is statistically significant. Other significant variables are average loan size, household head gender, and the age of respondents; however, the last three are negatively related.

#### Expenditure on Children's Education (EDEXP)

With the support of MFIs, most clients the world over spend a lot more on their children's education. This comes in two ways. Either, clients make additional expenditure on children who are already in school, or clients enrolled more children in school due to increased income. Significant variables positively related to this are membership duration, gender of household head, and household size. Pre-SAT loan and clients' age are also significant but negatively related. Central to this paper, our results show that the odds ratio for membership duration (SATDUR) is 2.43; this suggests that 'old clients' are 2.43 times more likely to spend on their childrens' education than 'new clients'. This is similar to what Maldonado and Gonzales-Vega (2008) found in Bolivia. Also, the odds ratio of household head is 3.07 and statistically significant. It suggests that female household heads are 3.07 times more likely to spend on their children's education than their male counterparts.

#### Improvement in Business (IMPBUS)

The major aim of MFIs is to help their clients move out of poverty as they give them credit to expand their economic activities. Positively related significant variables are membership duration and the education level of clients. Our results suggests that old member of the programme are 3.44 times more likely to improve upon their businesses than new members. Also, the results suggest that a client with high level of education who is an old member is more likely to improve his or her business than a low educated client.

#### Economic Security in Future (ECOSEF)

It is important to be economically secure in everyday day life, and we asked our clients to indicate their perception of economic security. The results indicate that average loan size, is positively related and statistically significant; whereas membership duration (SATDUR) is statistically significant but negatively related.

#### Composite Empowerment Indicator (EMPOWER)

With the composite empowerment, membership duration is statistically significant; the odds ratio is 3.36. This result suggests that 'old clients' are 3.36 times more empowered than 'new clients' on the overall empowerment. Average loan is also positively related and statistically significant suggesting, the importance of average loan received. On the other hand, age of the respondent is negatively related and significant. This suggests that empowerment reduces with increase in age of a client.

We used two of the methods Garikipati (2008) adopted to check the robustness of the results. First, we used the 'backward stepwise regression' to test SATDUR which starts with a full model (reported), and non-significant variables illuminated in an iterative process. We tested the fitted model when a variable is illuminated. The aim was to make sure that the model fits the data adequately. Once there are no more variables to be illuminated, the analysis is accomplished. We then used the likelihood ratio test to accept or reject the illuminated variables. The analysis indicated that the SATDUR coefficients were stable throughout the process, suggesting that our conclusion made on membership duration on the credit programme are robust. Second, we tested the significance of each of the indicators separately before we developed them. At the individual level, we found that the important variables maintained their signs and significance.

#### CONCLUSION

This paper set out to identify the impact of MFIs on poverty using a survey of SAT clients in Ghana as a case study. As noted earlier, there is conflicting evidence from studies on impact assessments of MFI programmes across the globe. This study set out to assess the effectiveness of SAT, a microfinance institution in Ghana, and the impact of its lending programme on the life of its clients. The paper used a survey of SAT clients as a case study The originality and uniqueness of the study comes from the use of both qualitative and quantitative data analysis to examine the impact of the scheme on these and other variables. With the qualitative data, we used descriptive statistics of survey responses to show the impact of the lending scheme on the clients. With the quantitative analysis, we constructed empowerment indicators, which we used to assess how they affect the independent variables in the logistic model. The intention was to add to the available literature in the area. We collected primary data from the field with the help from field assistance. The constructed indicators we used as independent and dependent variables to run logistic regression to determine the effects of the independent variables on the dependent variables.

To analyzed the data, the study divided clients into two groups — new clients who have been with SAT for less than three years, and old clients who have been with SAT for over three years. We found that even though 'new clients' on average received larger loans, it was 'old clients' who received greater benefits. 'Old clients' on average had earned higher monthly incomes than the 'new clients'. The results of the regression suggest that membership duration in the programme is an important determinant of assets ownership, the level of spending on a child's education, and improvements in clients' businesses. In all these areas, old members of the programme were seen to be more likely to have received greater benefits. In this, these findings largely concur with most others in the literature in suggesting a role for MFIs in the alleviation of poverty.

We found that the provision of financial services by a SAT has improved the life of its beneficiaries in employment creation to generate regular income, spend on children's education and increase their asset ownership. This research has provided adequate evidence in the various survey questions that we administered to suggest that 'long-time borrowers' became better off than those with less exposure to affordable credit. There is enough evidence to show from the findings that the provision of financial services by the Sinapi Aba Trust has helped to improve the life of its customers in Ghana. The study has detailed how clients benefited from credit provided by the institution. The success chalked up here could be a good guide, not only for Ghana, but also for the providers of financial services to the poor everywhere.

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Abdulla Galadari, Massachusetts Institute of Technology / Masdar Institute ABSTRACT

This paper analyzes the impact of debt forgiveness on economic equilibrium. Since the root cause of an economic crisis is debt, eradicating the root may solve the problem. However, it does not prevent future crises from occurring. It is found that debt relief in a global scale can help reach economic equilibrium, but there are challenges to its practicality due to behavioural economics.

JEL: A10, E00, E50, E60, F34, G33, H63

KEYWORDS: Bailouts, Debt, Forgiveness, Economic Crisis, Relief

#### **INTRODUCTION**

Imagine someone takes a twenty year loan. The amount of that loan is beyond the total income that the person can make in twenty years. Economists and finance professionals have a terminology for this kind of loan. They call it subprime. Now imagine the whole world taking a twenty year loan beyond the global production in twenty years. It does not require an economist to determine that there is something intrinsically wrong in this equation. There also exists a technical terminology for this type of loan. It is called mass hysteria.

In the outset of any economic crisis, immediately professionals and academics attempt to find solutions. To find solutions, they instantly look into the root causes of the economic crisis. Understanding the root cause allows them to understand the underlying disease that is affecting them. As any human disease, there are two main types of treatments. There are treatments of the symptoms and there are treatments for the underlying cause. Sometimes both of those treatments simultaneously are necessary to ensure the well-being of any patient. Similarly, the economic cancer that has spread throughout the world needs to be treated for its symptoms, as well as its root underlying causes.

There have been many proposals by economists, bankers, and world leaders on solving the economic crisis. Roles of the central banks and financial regulations have been pointed out as some of the issues that need to be tackled to solve the economic crisis (Fang, Hasan, and Mester 2011). However, if any of them actually works, then the crisis would have been solved already. Many of those solutions have actually eased the disease and possibly restricted the growth and spread of this cancer, but the cancer has not been fully eradicated and there is a high risk of recurrence.

This paper proposes a very different kind of solution. It hypothesizes that the crisis remains because global institutions are indebted to each other. Each institution has to pay its creditors. In order to pay its creditors, it must first receive its money from its own debtors. Its debtors must receive from its own debtors and so forth. The chain seems to be unending creating a very vicious cycle. Every institution attempts to take away the lifeline of its debtors as its own creditors attempt to squeeze out its lifeline. This causes a very unhealthy economy. An economy where almost every institution gets its credit ratings cut, only adding to the misery that already exists in this nightmare.

Now imagine the chain is cut, bringing a halt to this vicious cycle. The cycle is like the Wheel of Samsara. As every account payable from an institution is an account receivable to another, the debt is reborn as it passes through this cycle of suffering. Imagine this wheel can stop and the chain broken, would it bring Nirvana to the economy? The only possible way for this vicious cycle of suffering to stop

is through forgiveness of debts. If every institution forgives every other, then the crisis disappears in a blink of an eye, as the chain is broken and the wheel stops. To cure the economic cancer, it would require surgical removal. Nobody would say that it is not a painful procedure, but it is a treatment and a possible cure to the global financial crisis.

#### HUMPTY DUMPTY'S GREAT FALL

During the Great Depression of the 1930s, governments did not intervene with the market and the economy. There were no bailouts as the ones we see today. For that reason, the economy dipped significantly. With the latest economic crisis, governments have intervened in an attempt to ease the market's freefall. The major resolutions provided by governments are threefold, financial bailouts, economic stimuli, and austerities. Taylor (2009) argues that the current economic crisis did not deteriorate simply because the US government refused to bail out Lehman Brothers, but it was the market's uncertainty and perception of when and how the government would implement bailout packages, such as that made to AIG few days later. According to Taylor, the uncertainties surrounding the Troubled Asset Relief Program (TARP) seem to have dramatically changed the market's perception on the economy. As there are economics against government interventions, there are those for it. After all, when compared with the Great Depression, it seemed obvious that the government had to take some sort of action, unless it would not mind an economic depression. Some still argue that the government's inaction with Lehman Brothers fueled the situation. Acharya et al. (2009) do not only outline the importance of government intervention, but also provide a systematic procedure of when and how government intervention is to be implemented.

More than four years have passed since Lehman Brothers filed for bankruptcy. Not only has a domino effect occurred, but also confidence in the market was extinguished, causing a panic by the general public, which only fueled the problem even further. Iceland's three main banks, which account for all of the country's banking system failed about a month later (Danielsson 2009). For more than four years and many bailouts later, the European Union continues to struggle in controlling the economic crisis that swept the continent and the world. Struggling economies within the EU, such as Greece, Ireland, Italy, Spain, and Portugal brought a new understanding to the world of economics. They brought an understanding of how banks and sovereign risks have become interdependent on each other that they can no longer be separated, bringing in future threatening challenges to the economy of the EU (Barth, Prabhavivadhana, and Yun 2012). It is something when private institutions fail. However, when sovereign debt reaches an uneasy crisis, such as those sweeping Europe, then it becomes evident that government failures only deepen the economic separation with other members of the eurozone (Dias 2012).

Although the Asian markets experienced a delay in the effects of the global economic crisis, when compared to the US and Europe, they have recently started to feel the pressure. Noteworthy to state, Asia had its own financial crisis in the late 1990s. Consequently, its banking policies are more regulated since early 2000s from the lessons learnt of their financial crisis a decade earlier (Filardo 2011). Hence, as it recently only recovered from a financial crisis, then it is not surprising that it did not feel the great impact of the current global economic crisis. Nonetheless, that does not mean it is immune. The effect is cushioned and it lies towards the end of the domino pieces. China has a great export industry that was driven by US and European consumption in the pre-crisis era. China enjoyed a great trade surplus at the time, requiring less debt to accumulate at the time for its own growth and development. However, as demand for products have significantly been cut, then the Chinese economy would no longer grow at the same rate, and possibly bring about imbalance to the economy (Lardy 2011).

The domino pieces are only starting to gently brush over Asia. Another challenge to China has now become its unsustainable labour market, as it has reached the Lewis turning point (Cai and Du 2011).

Hence, not only is the Chinese economy getting affected by low international demand for Chinese exports, but it is also getting into economic constraints domestically.

Obviously, it seems that the domino effect of the economic crisis is still cascading down. Other issues that influence the economic crisis such as downgrading credit ratings also play a negative role in this vicious economic cycle. To offset the greater risks, it makes financing more expensive to get liquidity into economies that need it the most. Already those economies are struggling with liquidity. Downgrading the credit rating increases the interest rates on their debts making the economy sink even further. Gärtner, Griesbach, and Jung (2011) have shown that credit rating downgrades may only serve a self-fulfilling prophecy that can eventually drag healthy economies towards default.

## WHO ENDS UP WITH THE MONEY?

The real situation in the economy may be simplified in few words. Every institution is indebted to others. Every institution needs to pay back its creditors, but it can only do so if its debtors pay them. The creditors themselves are indebted to other creditors and are waiting for their debtors to pay them as well. If that is the case with every institution, so who actually gets to keep the money?

The reason every institution is seeking to get paid by its debtors is such that they can pay their own creditors. Hence, the money is simply transferred from one debtor to a creditor. The creditor is also a debtor to its creditors. The money continues to be transferred from one account to another. However, where does it stop? Who ends up keeping the money at the very end of the line? Nobody keeps the money, because it is not a line, but a cycle. The money simply moves within that cycle endlessly.

If the main problem of the economic crisis is debt, then the eradication of debt from the economy solves the crisis. Since everyone is indebted to others, then everyone is part of this vicious cycle. The surgical removal of the economic cancer spreading globally is simple. Debt must be eradicated. The easiest and quickest way to eradicate debt is by forgiving the debt. Imagine everybody forgives everyone else's debts. Where would the crisis be?

Though it may seem irrational, it must be remembered that at the end nobody gets to keep the money anyways. It simply moves within the cycle endlessly. Therefore, if the debts are forgiven, then also nobody gets to keep the money. The final result is still the same. There is no money to keep by anybody. However, at least, the crisis would be solved. The crisis can be solved with a blink of an eye through the forgiveness of the debts. Instantly, the crisis ceases to exist. The chain is broken and the cycle stops. Everybody is running after money that they would not be keeping anyways. Therefore, it should not be difficult to forgive the debts, since nobody is actually keeping the money.

Many institutions are writing off bad debts. There also exists cross-national sovereign debt forgiveness of many developing nations. Therefore, this is not a strange procedure within the economy. The difference is that it needs to be done on a macrolevel. All debts need to be written off, as everyone forgives everyone else's debts.

# PRACTICALITY OF DEBT FORGIVENESS

Bird and Milne (2003) argue that debt relief may not be an effective stimulus to low-income countries. They state that debt relief to low-income countries would not stimulate the nation's economic growth, because it will have little impact on future resource flows. However, the purpose of debt forgiveness as outlined in this paper is neither poverty reduction nor economic growth. The sole purpose for the proposal in this paper is to solve the crisis bringing a halt to the vicious economic cycle.

Some may argue that not all creditors are equal. There are creditors with larger deficits than others, as there are those with surplus, who would probably keep part of the money. Nonetheless, given the distress in the world economy and the interest rates, the debts do not decrease over time. When debtors default, then the creditors would anyways not receive the full money owed to them. Therefore, the end result would still be the same. Again, the only difference is that it brings the vicious cycle to a complete stop, allowing the world's economies to start afresh instead of entering a state of panic causing civil unrests that further drain nations from their resources.

Debts may cause tensions and distress within a nation. Menzies (2004) provides an interesting game theory analysis of debt forgiveness in conflict-affected countries. He shows that there is connectivity between education, health, peace, and appeasement of foreign creditors, and that they are all conflicting goals. He argues that debt forgiveness can positively influence peace, as there is less tension from appeasing foreign creditors. With the attainment of peace, there would be fewer resources wasted and more invested. Hence, even if the argument that debt forgiveness would not stimulate the economy is true, it does at least seem to indirectly have positive influence in conflict-affected poor nations. Not only that, but it would also significantly reduce the amount of expenditures on security due to civil unrest. The indebted nation does not want to have civil unrest due to paying off its debts. Creditors of the nation also would not want to see civil unrest, because that could mean that the political pressure exerted may avoid the repayment of the debts and also as more expenditure is made towards security unnecessarily.

There are Four Noble Truths for the economic crisis and the solution to the economic crisis.

- 1. The economy is in a crisis.
- 2. The origin of the economic crisis is debt.
- 3. The cessation of the economic crisis is attainable.

then the less liquidity the nation would have to repay its debts.

4. The path to cessation of the economic crisis is by eradicating its origin through forgiveness of debts.

Some may question the practicality of debt forgiveness. Debt relief is not an innovation. It has always existed in economics. Writing off bad debts is not something new. It has existed from the dawn of bankruptcies and defaults. It is always happening in the microlevel. Whenever defaults and bankruptcies occur in the microlevel, then bad debts are written off. The global economic crisis is due to bankruptcies and defaults in the macrolevel. Therefore, whenever they occur in the macrolevel, the bad debts need to also be written off once and for all, through universal debt forgiveness.

This idea is not new. A trend is emerging on debt forgiveness. Cline (2011) states that many observers are concluding that Greece is insolvent rather than illiquid, and in need of major debt forgiveness. The 50% write off on debt from private holders recently implemented in Greece is a form of debt forgiveness. Hence, debt forgiveness is an inevitable solution to nations struggling with the crisis.

Darvas, Pisani-Ferry, and Sapir (2011) have also argued the essentiality of debt forgiveness in the case of Greece, though they limited the forgiveness to 30% write off, based on more optimistic growth assumptions. Seck (2010) has illustrated that debt forgiveness have been effective in the past to economies with tight liquidity in sub-Saharan African nations. They show that debt forgiveness have given the nations two major advantages by removing the future costs of servicing the debts and reducing the financial uncertainty. In other words, if one of the major ingredients to an economic crisis is uncertainty and confidence level of the market, then universal debt forgiveness removes the crisis and all the catalysts that worsen it. If this has been proven to work for the best in poor nations, then it may be extrapolated to include the global community.

Gunter, Rahman, and Wodon (2008) have carefully studied the inequity of debt relief distribution among donor and recipient countries. However, their findings are based on existing conditions and

categorizations of world economies that dictate the type of debt relief and their conditions between donor, gracious creditor, and recipient countries.

Other forms of debt relief also exist, ensuring the well-being of both creditors and debtors. Switzerland established a Swiss Debt Reduction Facility (SDRF) in 1991 as a form of a debt reduction initiative (Buckley 2009). The SDRF piloted debt-for-development conversions, where debtors are required to use part of the debt forgiven as capital for development. Italy and France have implemented similar debt relief programs. Germany has a similar program, which is debt-for-nature, as part of environmental reforms in indebted countries. Norway is also a leader in debt relief programs. Norway has actually pioneered debt relief programs for illegitimate debt that is lent for irresponsible purposes that are not for the best interest of the debtors. When the US strongly argued the total cancellation of Iraqi debts to the Paris Club creditors in the aftermath of the Iraq War, France and Germany insisted that the US supports the Heavily Indebted Poor Countries (HIPC) initiatives. Buckley (2008) has illustrated that the global financial crisis may be solved through debt-for-development programs. Therefore, practicality or mechanisms already exist.

De Grauwe (2011) has brought forth evidence that imposing punishment approach for managing the economic crisis within the eurozone is detrimental to all those involved, both the creditors and debtors. With the threat of punishment comes uncertainty in the market. With uncertainty, there is lower confidence level. With lower confidence level, the crisis delves deeper into the abyss. Essentially, there needs to be room for forgiveness.

Lei, Tucker, and Vesely (2009) had done an experiment comparing debt forgiveness and debt buyback. They have shown that although debt forgiveness is an effective tool, it reduces the overall efficiency due to a paradox. Krugman (1988) and Sachs (1989) state that when a poor nation receives debt relief, it loses credibility for future loans. Thence, it would forgo profitable development projects due to the lack of resources. Nonetheless, this does not contradict this paper with the goal and aim to propose a solution for the economic crisis, and not challenges of economic growth.

Europe already has the basic mechanism in their laws for debt forgiveness programs. Since the basic ingredients for the laws and mechanisms already exist in some form, then an amendment or legislating new reforms for universal debt forgiveness is practical. Debt forgiveness has proven to be effective on its implementation with poor countries. It has been found to be practical and a factor for peace. The real argument in saving the world economic crisis today is no longer the question of the practicality of debt forgiveness, but the impracticality of not forgiving debts. Nonetheless, the main problem arises in debt forgiveness is the tendency that debtors would not learn from their mistake and would not take future responsibility in the world of economic behaviour.

# CONCLUSION

As all institutions are indebted to each other, everyone is in distress. Everybody is under pressure of paying off their loans and extend their pressure to their debtors to repay their loans, such that they can pay their creditors. Everyone in the equation is both a debtor and a creditor. It is a vicious cycle on an economic wheel that continues forever. This wheel is causing a crisis. This wheel illustrates the suffering of the global economy as it stands today. Since the origin of the crisis is debt, then by removing debt, the crisis disappears instantly. The crisis exists solely due to debt. Hence, the only way out of the crisis is by removing debt. Therefore, the only solution to the crisis is the forgiveness of debts. If everybody forgives the debts of each other, then the ingredient that creates the crisis is surgically removed, curing the economic cancer in the world. However, more research is required in identifying the economic equilibrium mathematically if this concept is theoretically possible.

Since everybody is trying to get money to pay off debts, nobody ends up keeping the money anyways. Therefore, there is nothing essentially lost by forgiving debts. A universal forgiveness of debts is the only practical solution that will bring liberation to the world's economy, as the economic crisis attains Moksha and plunges into Nirvana.

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# THE RELATIONSHIP OF BRAND ASSOCIATION AND LOYALTY: AN EMPIRICAL STUDY FOR RETAIL BANKING IN INDIA

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# ABSTRACT

The study investigates the relationship between brand association such as safe bank, quality of services, ATM services, innovative bank, complete services, well managed bank, convenient timings, deposit rates, lending rates, no hidden charges and polite staff, and loyalty for retail banking in India. The author considered primary bank as a measure of loyalty. The data for the study was collected by utilizing a short questionnaire containing a specific questions relating to brand association for a primary bank. Respondents were contacted in a bank branch in India. Chi Square analysis was used to assess the relationship between brand associations and loyalty. During the study, demographics of the respondents were also captured. Majority of respondents considered customer service as the key factor in selecting a bank. The findings indicate that there is strong relationship between brand associations such as, ATM services and convenient timing, and brand loyalty. Among demographic factors, age was found to have relationship with primary bank.

The findings offer great value to marketers. Marketers strive to achieve objective of brand loyalty from their customers. There are various brand associations that are valued by customers. It is important for a marketer to figure out the brand associations which results in brand loyalty. If the study is carried out for large sample, it will also help to know which brand associations, leading to brand loyalty, is assigned to particular customer segment. A separate study for corporate and SME customers will also offer useful insights to the bank marketer.

KEYWORDS: Brand Associations, Brand Loyalty, Primary Bank, ATM Services, Convenient Timings,

# **INTRODUCTION**

At a time of increasing deregulation, intensifying competition and evolving customers' demands, customer loyalty for a bank is difficult to achieve. Customer loyalty is the ultimate objective for a marketer. Customers associate the brand brands for certain reasons. These can be considered as brand associations which may be in the form of unique benefits and offerings. Understanding and identifying customer's perception play an important role in bank selection. While the chain of events that leads to brand loyalty runs through all the operation of a bank, it begins with understanding how certain brand associations lead to increased loyalty. Arguably, finding relationship between brand associations and loyalty will be of great help to the marketer. Specifically, very little is known about whether there is a relationship between brand association and loyalty. Against this backdrop, the current study attempts to address fundamental questions: Is there any relationship between brand associations and loyalty? Which brand association exhibit relationship with brand loyalty?

Survey of bank customers in a bank branch in India serve as the setting of the current study that investigates these issues. Various loyalty measures have been used in different industry. Our study focuses on primary bank as it is perceived to be a loyalty measure by a customer. Banks are keen that customers consider their bank as a primary bank. Customers considering a given bank as primary bank offer lot of advantages to banks. Primary bank is not readily available in bank's database, it is captured during customer interactions. Our study attempts to capture the brand associations that are valued by

primary bank customer. The paper concludes with discussion of the results, their implications, limitation of the study and suggestions for future research.

### LITERATURE REVIEW

Previous Studies have identified the benefits of customer retention to an organization (Colgate, et al 1996.; Reichheld and Sasser, 1990; Storbacka et al. 1994). Customer retention can be tracked by using different measures. One school of thought assumes that the longer the customer stays with an organization, higher is the lovalty (Reichheld and Sasser 1990). Other schools of thought give importance to the increased attention that customer provides to a service provider. One such measure is whether customer considers the bank as primary bank. In fact, consumer research reveals that consumers keep an average 3.4 financial products with the institution they consider as primary bank, compared to only 1.8 products with institutions that are considered secondary. Research indicates that consumers keep 80 percent of their total savings deposit with primary bank (McAdam and Nagarkatte 2004). This may be in the form of customer treating the bank as primary bank. Primary bank is the bank where customer conducts major transactions. There are several advantages of adopting retention strategies. Research findings also suggest that the costs of customer retention activities are less than the costs of acquiring new customers. For example, Rust and Zahorik (1993) argue that financial implications of attracting new customers may be five times as costly as keeping existing customers. Relationship is established between increased customer satisfaction and profitability, indicating that attainable increase in satisfaction dramatically improves profitability (Hallowell 1996). Research has also shown that longevity does not automatically leads to profitability (Colgate, Stewart and Kinsella, 1996; Beckett et al. 2000) indicate that in some instances, customers appear to remain loval even though they hold less favorable views toward these service providers. Banks spend more efforts in creating brand image as there is very little differentiation that it offers to the financial products. Banks, therefore, try to create differentiation in areas that are important to customers. Clearly, there are compelling reasons for bank management to consider factors that might increase retention rates. There is substantial evidence which supports retention efforts by banks (Marple and Zimmerman 1999; Fisher 2001). Factors leading to customer retention have been investigated and researchers have identified many retention measures.

In a competitive market, brands offer scope for differentiation of the services (Parasuraman, 1997). In the long run, branding, targeting and positioning would be much more effective if the supplier had some perceptible advantage to both intermediaries and customers (Baker, 1993). Banks strive to create their basic services with additional and potential service features and value in order to create a sustainable competitive advantage (Chang, Chan, and Leck 1997). The most likely way to retain customers and improve profitability is by adding value via a strategy of differentiation while increasing margins through higher prices (Baker 1993). A positive brand image is created by marketing programme that link strong, favorable and unique associations to the brand (Keller 2006). To create the differential response, it is important that some of the strongly held brand associations are not only favorable but also unique. It is, therefore, important to identify brand associations in a given situation. Furthermore, research also indicates that financial services firms attempt to actively target consumer segments by integrating service quality, brand loyalty, and customer retention strategies (Ennew and Binks, 1996).

We look at various factors that influence customers to select a bank and these factors are considered as brand associations. In financial services, customer service plays an important factor in creating a preference for a customer. It is well documented in a study by Leeds (1992) that forty per cent of customers switched banks because of poor customer service. The study also showed that increased use of service quality measures and professional behaviour improved customer satisfaction. Customer choice for a bank depends on various other factors. A study by Erdener Kaynak, and Talha D. Harcar (2005) revealed that banks were evaluated more positively by customers in areas such as extra services offered by bank, image of the bank and convenience of the bank. Huu Phuong Ta and Kar Yin Har (2000)

indicated that undergraduates place greater emphasis on the pricing and product dimensions of bank services. Carolyn, Hill and Rakowska (1996) indicates that most important factors influencing selection of a bank are reputation, price and service. Bloemer, Ko de and Pascal (1998) investigate how image, perceived service quality, and satisfaction determine loyalty in retail banking. Laroche et al. (1976) reveals that about 90 per cent of the respondents bank at the branch nearest to either home or place of work. Convenience, in terms of location, is found to be the single most factor for selecting a bank.

#### Objectives of the Study

The paper attempts to identify the relationship between bank loyalty and brand associations of the primary bank, namely, safe bank, salary account, location, quality, service oriented, availability and location of ATM, innovative bank, offering complete services, well managed bank, timings, deposit and lending rates, no hidden charges and polite staff. Although there are several measures available for tracking loyalty, we considered primary bank because primary bank plays an important role in customer's perceived relationship with the bank branch. Whether a customer considers primary bank can only be obtained by asking the respondent while conducting a survey. Primary bank has been referred as important loyalty measure in literature pertaining to retail banking. The study also seeks to establish relationship between primary bank and demographic factors. The objective aims to draw implications for further research and practice.

#### **RESEARCH METHODOLOGY**

A descriptive research design, involving samples collected from the branch, was used for the study. Prior to the study, a pilot study was conducted with the bank branch for refinement. As the study was based on a survey of customers, a structured questionnaire was used as a research instrument. Demographic characteristics such as age, gender and occupation was captured for One hundred and forty respondents. During the survey, respondents were asked whether they consider the branch as a primary bank. The Likert type three point scale (3 levels-- disagree, can't say and agree) was used for capturing brand association of their primary bank. Three points scale is considered suitable for multi dimensional analysis (Cooper and Schindler 2003; Aaker et al. 2002).

#### Sample Profile

As indicated from the following table, majority of the respondents were Students (23.6 %), followed by senior officers (18.6 %), officers (10 %) and retired (10 %).

Table 1:	Occupation	Breakup
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	Frequency P	Percent
Businessman	15	10.7
Unskilled	6	4.3
Petty Trader	6	4.3
Retired	14	10.0
Student	33	23.6
Housewife	7	5.0
Farmer	3	2.1
Self-Employed	10	7.1
Shop Owner	3	2.1
Supervisory	3	2.1
Senior Officer	26	18.6
Officer	14	10.0
Total	140	100.0

#### <u>Age</u>

As indicated from the following Table 2, majority of the respondents were in the category of age group of 20-24 (30 %), followed by 35-44 (20.7 %) and age group of 55 and above (10.7 %).

Table 2: Age Break up

Age	Frequency	Percent	
Туре			
Less than 19	15	10.7	
20-24	42	30.0	
25-34	23	16.4	
35-44	29	20.7	
45-54	6	4.3	
55+	25	17.9	
Total	140	100.0	

## Gender

As indicated in the following Table 3, male constituted 92.7 % of the total samples.

Table 3: Gender Breakup

Gender Type	Frequency	Percent
Male	130	92.9
Female	10	7.1
Total	140	100.0

### Education

As indicated in the following Table 4, respondents who have passed SSC (matriculate exam) but not a graduate constituted about 43 % of the total samples, which was followed by graduate and post graduate (29 %) and professional graduate and post graduate (21 %).

Table 4: Education Breakup

Education Type	Frequency	Percent
Graduate & PG	30	21.4
(Professional)		
Graduate & PG	40	28.6
SSC but Not Graduate	60	42.9
Schooling 5-9	9	6.4
Schooling upto 4	1	.7
Total	140	100.0

During the study, reasons for bank selection were also captured. Based on the data analysis, it has been found that 77 % of the respondents considered service to be a prime factor in bank selection. Respondents attached lesser importance to factors such as safety (8.6 %), convenience (6.4 %) and better rates (4.3 %).

#### Data Analysis.

The results of the analysis are provided in Annexure-I, on which our analysis is based. The data in Annexure contains cross tabs, which relates to primary bank and brand association of a primary bank. Chi Square is conducted to ascertain whether any relationship exists between the above variables. In case there is a relationship, the findings indicate the type of relationship. The summary is tabulated with a summary of conclusions in Table 5.

Brand Associations/	Significance level at p	Conclusions (Relationship with Primary Bank)
		(Relationship with Filmary Bank)
Demographic factors		
Safe Bank	Can not be calculated	All respondents considered primary bank as safe bank irrespective of the fact
Sale Dalik	Can not be calculated	whether the bank was considered as primary bank
Convenience	0.223	Relationship does not exist. Majority agreed that their primary bank offers
(Location)		convenience in terms of location.
Quality of Service	0.054	Relationship is not significant at 95 % confidence. It can be considered as boundary situation.
ATM Services	0.000	Relationship exists. Phi value of 0.574 is more than 0.3, we can say that the relationship is strong.
Innovative	0.964	Relationship does not exist.
Bank		······································
Complete Services	0.007	Relationship exists. As the Phi value is less than 0.3 (0.266), relationship can be considered as moderate.
Well Managed bank	0.568	Relationship does not exist. Majority of respondents agree that their primary bank is a well managed bank.
Convenient	0.002	Relationship exists. The relationship can be considered as moderate at phi value of
Timings		0.30
Deposit Rates	0.109	Relationship does not exist.
Lending Rates	0.588	Relationship does not exist.
No Hidden	0.589	Relationship does not exist.
Charges		
Polite Staff	0.169	Relationship does not exist.
Age	0.000	Relationship Exists. The relationship can be considered as strong as phi value is
-		0.440.
Education	0.709	Relationship does not exist.
Occupation	0.0708	Relationship is not significant at 95 % confidence level.

Table 5: Primary Bank and Brand Associations – Chi Square Analysis

The results of correlation indicate strong positive correlation between the following variable:

- 1. Well managed bank Convenient location
- 2. Convenient timing Convenient location
- 3. Complete Services-- Quality of service
- 4. Well managed bank- Quality of service
- 5. Deposit Rates- Quality of services
- 6. Lending rates- Quality of services
- 7. Innovative Bank- Complete Services
- 8. Innovative Bank- Well managed bank
- 9. Complete Services- Deposit Rate
- 10. Complete Services- No Hidden Charges
- 11. Well managed bank- Convenient timings
- 12. Well managed bank- Lending rates
- 13. Well managed bank- Polite staff
- 14. Well managed bank- No hidden charges
- 15. Deposit rates- Lending rates
- 16. Lending rates- Polite staff

## CONCLUSIONS, MANAGERIAL IMPLICATIONS AND LIMITATIONS

Earlier studies focused on the factors governing the choice of a bank. There were varying results obtained for the bank selection factors. Our study considered a brand association which is an attribute or benefit that differentiates a brand from the competing brands. For example, certain bank brands are regarded high on trust by customers while other bank brands are regarded high on ATMs. The linkages of these brand associations to the benefit that customers seek through purchase have been studied. A variety of brand associations were shown to moderate the effect to bank selection. Marketers, based on identification of those factors, continue to give importance to those factors that are highly valued by customers while selecting a bank. The ultimate goal of marketers is to create brand loyalty. Many measures are available for tracking brand loyalty. Our study considered primary bank because consumers give more importance to primary bank. Since information regarding primary bank is available from customers, the study captured the customers' perceptions regarding primary bank. There are numerous advantages of customers treating a given bank brand as primary bank. Customers not only keep more deposits in primary bank but they also buy more products from the primary bank. Marketers strive to ensure that higher percentage of customers treat their bank as primary bank. It is, therefore, important for marketer to relate primary bank with the brand associations that are valued by him. Our study attempts to find out whether any relationship exists between brand associations and brand loyalty in the form of primary bank. Although there are different brand associations that leads to increase in loyalty. Other brand associations may fulfill the necessary condition for customer's relation with the brand.

The study indicated that there is strong relationship between brand loyalty and brand associations such as, ATM services and convenient timing. Findings of the study indicated that more number of customers give more importance to customer service while selecting a bank. It has been observed that customers keep multiple bank accounts. With the increase in competition, this trend is pronounced. In such a situation, it is advantageous to a marketer if more and more customers treat their bank as primary bank.

Our research did not examine whether these brand associations are related to brand loyalty in other bank branches. Further coverage of the study and comparison between banks would be helpful. It is possible that based on different market segments, a particular market segment will value a given brand association in terms of brand loyalty while other market segments will signify relationship between brand associations and loyalty. Indeed, an important direction for further research is to examine the brand associations that results in brand loyalty for various customer segments. The present study was limited to retail customers who visited bank branches. There is possibility that similar study for different customer groups can add more value to banks.

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# HOW DOES FOREIGN DIRECT INVESTMENT AFFECT ECONOMIC GROWTH OF ARAB COUNTRIES?

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## ABSTRACT

This paper examines the growing importance of foreign direct investment (FDI) in Arab region as a source of financing for economic development. The study considers the Arab countries as sub-regional groups, Gulf countries (GCC), Arab Maghreb Union (AMU), and Arab Mashreq countries. Using panel data fixed effects; the study investigates the relationship between FDI and the economic growth in the Arab region, covering period 1991-2011. The study also investigates the channels through which it may be benefiting the economy. Our study finds that FDI have a positive effect on economic growth in Arab region. However, some other factors such as openness surpass the impact of FDI on economic growth.

JEL: F43, O11, O4

KEYWORDS: Foreign Direct Investment (FDI), Economic Growth, Sub-Arab economic group.

# **INTRODUCTION**

Foreign Direct investment (FDI) has been studied worldwide due to its potential effects on the host economy. One of the most studied effects in development economics is the relation between economic growth and FDI. Despite the huge research, previous studies have produced conflicting evidence about this relation. For example a study by Blomstrom (1996) examined the relation between FDI and economic growth during the period 1960 to 1985 in 78 developing countries and found a significant positive impact for FDI on per capita income growth. Another study by Bashir (1998) examined FDI in MENA region (Middle East and North Africa) for the period 1970 to 1990 and found statistically a positive relation between FDI and growth. Similar results were reached by De Mello (1999) as he examined the relation between FDI and growth using both time series and panel data. Another study by Gao (2001) studies the same relation using data from all countries using a simple log linear equation with cross-country method. The study concludes a positive relation with positive significant coefficient. A study by Lensink and Morrissey (2001) used cross-section and panel data for the period 1975-1997 in Uganda and reached a positive relation between FDI and growth. Eller (2005) analysed the influence of FDI and recognized FDI as an important element in the solution of problem local capital scarcity and low productivity on the host country for less developed countries.

Some other studies have found a doubtful relation between FDI and growth. For example, a study by Fry (1992) using pooled time series cross-section during the period 1966-1988 for 16 developing countries concluded that FDI has a negative impact on savings and does not exert a significant effect on the growth rate. A study by Carkovic and Levine (2002) studied the relation between FDI and growth using data from the IMF and World Bank during the period of 1960-1995. They found that the FDI does not have a positive robust effect on economic growth. Another study by Hassan (2004) on the relation between FDI and growth for 95 developed and developing countries for the period of 1980-2001, found no significant

relation between FDI and growth. A study by Lipsey (2002) on the previous FDI studies have found that almost all studies where there is a positive relation between FDI and growth in specific periods or among specific groups cannot be universal as there are circumstances, periods and countries where FDI has insignificant relation with growth. In this paper, we will be focusing on the relationship between FDI and growth. We will question the association between FDI and economic growth in a sample of six different countries (4 countries from the GCC: UAE, Saudi Arabia, Kuwait and Qatar; 2 non GCC countries: Egypt and Morocco).

The data set we use for the empirical analysis will be a panel of annual data from 1991 to 2011 for those six countries. FDI data are obtained from UNCTAD's FDI online database.

$$g_{i,t} = \beta_0 + \beta_1 (FDI_{i,t}) + \beta_2 (O_{t-1}) + \beta_3 (INF_t) + \beta_5 (H_{t-1}) + \beta_4 DUM + \varepsilon_{i,t}$$

Where g is the growth rate of per capita GDP. FDI is the foreign direct investment, O is openness, INF is inflation, H is the initial level of human capital and DUM is a dummy variable for oil producing countries. Openness of the trade is measured as the ratio of imports and exports to GDP. As for human capital, it is the average years of secondary schooling for the population above 25 years. The dummy variable is represented by 1 if the country is oil exporter and 0 if not.

Variable	(1) Pooled	
Foreign Direct Investment	0.007	0.004
ç	(1.62)	(1.57)
Openness to trade	0.0003	0.0005
-	(3.24)	(2.89)
Inflation	-0.016	-0.007
	(-4.12)	(-2.81)
Human Capital	0.006	4.941
-	(2.15)	(1.62)
DUM1	0.0009	0.0004
	1.81	1.63
Constant	0.125	0.154
Observations	121	121
Countries	6	6
Years	1991-2011	1991-2011
$R^2$	0.1844	0.2126

Table 1: The Effect of FDI on Economic Growth

The main purpose behind this paper is to study the relation between FDI and growth and to test empirically this relation with data collected from six countries representing GCC, Aarab Mashreq and Arab Maghreb. The empirical analysis is performed using panelled and panelled fixed that cover the period from 1991 to 2011. The results obtained in this paper conclude that FDI have positive impact on economic growth but statistically insignificant at 5 percent level. This mean that there is a link between FDI and growth but tends to be weak in those countries. The results also show that other factors such as openness to trade may have a larger effect on growth when compared to FDI.

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# NON-FINANCIAL CORPORATE DEBT

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## ABSTRACT

In the paper we analyze the development of non-financial corporate debt (measured as liabilities minus shares and other equities) in the time period 1995-2010 for 17 european OECD countries (13 full- fledged market economies plus 4 postsocialist OECD members). To cater for the possibility of endogeneity of the right-hand variables we relate forward moving 2-and 3-year average of growth of real GDP per head with the contemporaneous right-hand variables. Descriptive statistics reveal that in the period the non-financial corporate debt was rising steadily. In the panel regressions (fixed effect models) the coefficients showing the impacts of this debt on GDP growth rate have had the sign minus and were highly statistically significant.

**JEL** : D9, H3, O4

**KEYWORDS:** non-financial corporate debt, economic growth, fixed effect models

## INTRODUCTION

One of hte hypotheses tested in the literature devoted to the development of debt is that private debt surges are recurrently antecedent to banking crises. Therefore, alongside the government indebtedness, one must take into account also the debts of private agents, especially those of households and non-financial corporations.

After the introduction, in the second section the brief literature overview is presented. The third section deals with data and descriptive statistics whereas the fourth section describes and evaluates the results of panel regressions.

## LITERATURE REVIEW

The often discussed sustainability of public finances must tackle both the macroeconomic and sectoral levels. The sustainability positions of all the sectors are related to each other. See e.g. Burger (2003). According to Lequiller and Blades (2006) in national accounts a surplus run by one sector must be reflected as a deficit in one or more of the remaining sectors. Unsustainability may be shifted from governmental to another sector of the economy, e.g. household or corporate sector. Government runs the risk of indebtedness merely being "passed around" between sectors. If this happens, indebtedness may never truly be addressed unless it is flushed out of the economy by means of a spate of bankruptcies in household and corporate sectors as described in Burger (2003) and Cecchetti, Mohanty and Zampoli (2011).

Kumar and Woo (2010), Ododekun (2001), Checherita and Rother (2010) and others explore the impact of high debt on long-run economic growth suggesting a negative impact of high debt on growth and tackling thresholds, non-linearities, endogeneity and a heap of subtle econometric problems. E.g. Checherita and Rother (2010) stress, for the 12 pooled euro-area countries, that for the debt-to-GDP ratio, turning point is roughly between 90 and 100% on average.

Having summarized the results of empirical literature we conclude that not only the indebtedness of the general government but also the debts of non-financial corporations are worth of the empirical investigation.

# DATA AND DESCRIPTIVE STATSTICS

The source of data in this paper is represented mainly by detailed national accounts published regularly by OECD. Following OECD financial statistics we use 710 Financial balance sheets-consolidated and define non-financial corporate debt as liabilities minus shares, equity and financial derivatives as in SNA (2008, par. 22.104).

We have gathered data for the time period 1995-2010 for the sample of 17 european OECD countries. In the parentheses see cross identifiers used in panel analysis: Austria (AT), Belgium (BE), Germany (DE), Denmark (DK), Estonia (EE), Greece (EL), Spain (ES), Finland (FI), France (FR), Hungary (HU), Italy (IT), The Netherlands (NL), Norway (NO), Poland (PO), Portugal (PT), Sweden (SE), Slovakia (SK). According to Sala-i-Martin (1994) OECD countries converge to the same steady state because they appeal to be a homogenous set of countries. Therefore using this relatively restricted cross-sectional sample helps mitigating the issue of heterogeneity with the caveat that 4 postsocialist countries exhibit still differences vis-a-vis other OECD member states in this sample.

Ratios of non-financial corporate debt on the GDP in current prices (%) reveal high indebtedness especially in Sweden, The Netherlands, Portugal and Slovakia (the mean over 100% of GDP), low indebtedness in Poland and Greece (?) and high fluctuations in Spain, Hungary, Sweden and Portugal. Looking at the development in time three facts stand out: a) long-term high indebtedness in the Netherlands (over 100% of GDP during the whole period); b) high increase in indebtedness after 2007 in the majority of OECD countries in our sample (first of all in Spain, Sweden, Denmark, Hungary, Italy and Norway); c) Slovakia as an outlier with a steady decreasing ratio.

## PANEL REGRESSIONS

We write the growth regression as:

yit = 
$$\alpha i$$
 +  $\beta it Xit$  +  $\nu i$  +  $\eta t$  +  $\epsilon it$  (1)

y...growth rate of real GDP per head;  $\alpha$  and  $\beta$  are regression coefficients; Xit is vector of independent variables (controls and debt-to-GDP ratio);  $\epsilon$ it is an unobservable error term; i, t are subscripts (country and time subscripts, respectively).

In the preferred fixed effect models (Hausman tests)  $\alpha i$  indicates that the intercepts of the seventeen countries may be different and we consider three cases: 1) the  $\beta i$  are common across countries and periods; 2) the  $\beta i$  coefficients are country specific; 3) the  $\beta t$  coefficients are period specific. We have split the debt variable in the Xit into three groups (common regressors, country specific regressors and period specific regressors].

E.g. in the first case a 1 percentage point increase in debt-/to- GDP ratio is associated with an approximately 7 basis point reduction in per head GDP growth rate when we use 2-year ahead averages. The coefficient is highly statistically significant (t = -7,74).

# CONCLUSION

The basic estimation technique in this paper has been panel fixed effect models corrected for heteroscedasticity and autocorrelation. We have used also cross-section specific and period specific coefficients to gain a more profound look into the matter. The coefficients showing the impacts of corporate debt on GDP growth rate have had almost in all examined cases the sign minus and have been

highly statistically significant. In spite of the well known fact that correlation does not mean causation we conclude that in our sample and time period the increase in non-financial debt-to-GDP ratio has had a negative effect on economic growth.

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# **CHANGING ROLES OF ACCOUNTANTS**

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## ABSTRACT

Under the influence of globalization, an accounting professional must review its significance. One method to determine the role of accountants is to carry out their questionnaires. Based on a survey of public sector accountants and data from current accounting documents, tensions indicate that accounting practices are not necessarily in the line with declared accrual accounting norms. This paper shows the results of processing survey of government and public sector accountants in the two regions of the Russian Federation. The survey was carried on the same issues that were raised during questioning conducted by CIMA among commercial finance professionals in manufacturing, financial services, and wholesale and retail trades. The survey data in Russia compared with the survey results at the international level.

**KEYWORDS**: time reported, preferred recording bases, role of accountants.

## **INTRODUCTION**

Singleton-Green points out "conventional theory and practice is ill-suited to the challenges of the modern environment, and that accounting practices and corporate behavior are inextricably connected with many allocative, distributive, social, and ecological problems of our era. From such concerns, a new literature is emerging that seeks to reformulate corporate, social, and political activity, and the theoretical and practical means by which we apprehend and affect that activity. The major decisions on accounting and its regulation are unavoidably political because they are government policy issues that affect the general welfare as well as the welfare of particular individuals and groups" (Singleton-Green B. 2010).

However, in their paper Van der Stede and Malone R. (2010) argue that accountants kept the books and assured that statutory requirements were met. Even as the role became more complex with innovative organisational models, a proliferation of regulations, and a glut of new financial instruments, the focus on the books remained. And those trends, according to which many professional accountants can manage risk at a high level of strategic management, have not yet found distribution in the area of budget accounting in Russia. It shows results of the survey are listed below. The idea of questioning was born as a result of the study materials provided by CIMA at the World Congress of Accountants in Kuala Lumpur in November 2010 (Van der Stede and Malone. 2010). CIMA has conducted an online survey in manufacturing, financial services, and wholesale and retail trade. They analyzed the results of research on the Anglo-Saxon markets (Australia, New Zealand, North America, United Kingdom) and Asia (China and India).

## **RESEARCH DESIGN**

The survey covered 69 respondents, who were in training courses in the Russian Federation. Here are the results of the processing of questionnaires, filled with 36 respondents from Moscow and 33 respondents from the city of Arkhangelsk. In Moscow and Arkhangelsk government establishments' accountants were interviewed during December 2010.

Questionnaire is based upon the results of the survey conducted by Van der Stede and Malone (2010) in order to compare our results with the global trends. The questionnaire consists of questions on ranking the time allocation by accountants for the following activities: « accounting operations; external reporting; management accounting; management support; management information systems; other» (Van der Stede and Malone R. 2010, pg.2).

The questions were slightly changed in accordance with Russian conditions. But the bulk of the issues have not changed, and time allocation by type of activity was divided into:

• Accounting operations (processing of source documents, data loading to the computer, accounts receivables and payables, internal financial reports);

• External reporting (financial, fiscal and statistical reports, in particular, the interaction with the treasury or the credit institutions, financial risk management, including internal audit, compliance with regulations);

• Management accounting (preparation and interpretation of management accounting information, such as forecasting, budgeting, costing and cash flow management);

• Management support (identifying and analyzing strategic options, decision support, planning and tracking of key performance indicators, testing, strategic management accounting and business management);

• Management information systems (development, implementation and maintenance of management information systems);

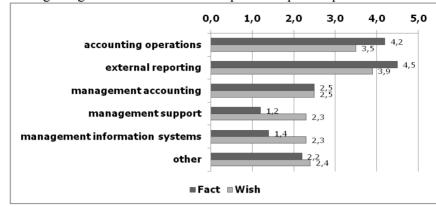
• Other (personnel management, training and other activities).

In the questionnaire the additional questions have been added to ensure understanding of the principles and traditions of the Russian governmental accounting. It was also included two "hot" questions that reflect most discussion in the governmental accounting in Russia. The questions are: "What recording bases do you prefer?" And "Is it necessary to have value recognition criteria for the assets of the state establishments?" And also we have been interested in responses concerning the reasons of changing roles of accountants in recent years. To assess the changing role of accountants the following question has been asked in the questionnaire: «Reasons for the changing role of accountants in recent years: Legal requirements; Professional and ethical requirements of the self-regulating non-profit organizations; Requirements from employers; Other».

## **QUESTIONNAIRE RESULTS**

The significance of each type of accounting work by state accountants is showed at Exhibit 1. Each type of work respondents scaled from 1 to 5, that corresponds to the importance of work identified in the questionnaire. As a result, the average score obtained from respondents has been calculated. In addition, the evaluation of the significance of the work was carried out from two perspectives: from the perspective of the current distribution (fact) and in terms of preferred (wish) of the distribution of the work. Comparison of the significance between the current and preferred distribution of work on five-point scale is shown at Figure 1.

Figure 1 shows that the preferences of Moscow accountants on the distribution of working hours do not differ much from the current state of affairs. According to the poll turns out that they have a job of their dreams. But during the discussible the response to this statement was either a smile or a denial. Apparently, the survey did not accurately reflect the true picture. Perhaps a survey should be conducted based upon the more explicit issues and in other settings. To do this, an in-depth study on how, where, and what questions to ask to get a picture close to reality. Comparison of the significance between the current and preferred distribution of work on five-point scale of Arkhangelsk accountants is shown at Figure 2.



#### Figure 1. How Arkhangelsk government accountants spend and prefer spend their time

Interest is the comparison of survey data on the actual timing of the government establishments' accountants of the two Russian cities: Moscow and Arkhangelsk. Comparing the actual distribution of working time accounting of government establishments on a scale of Moscow and Arkhangelsk Accountants shown at Figure 3.

Results of the comparison of survey data presented in Figure 3 show that the actual distribution of working time in the city of Arkhangelsk is slightly different from the actual distribution of working hours by type of work in Moscow. Perhaps more emphasis on external reporting in the city of Arkhangelsk (Arkhangelsk 4,5 vs. 3,4 in Moscow) is due to a lower degree of computerization of accounting in the peripheral regions of the Russian Federation. Accordingly, this fact is confirmed by the fact that the city of Arkhangelsk more time is required to participate in developing, implementing and maintaining systems, management information systems (1,4 in Arkhangelsk against 0,7 in Moscow).

Feature of Russian governmental accounting is that it should be organized in such a way as to cause the least possible complaints from the state financial control bodies. Therefore, the accountant's from government establishments are trying to keep a record strictly according to instructions. In addition, the respondents are accountants and government servants and on duty are bound to act within the legal framework. Accordingly, creativity or participation in strategic management is not foreseen in the existing regulations. Accountants informally during the courses and seminars of improving qualifications say that they might have something to offer for strategic planning, but only if they have a legal framework for doing it. As they continue, there is not enough time to think and to suggest. Most of the time is occupied with providing some documents, calculations, preparation and fulfilling the contracts. In addition, all information can be found at the accounts and accounting reports, but directors or managers usually do not understand accounting Figures and accountants need to translate from accounting language to business usual language. As one of the accountants say "Director doesn't understand it. He just says: I do not need your debit and credit. You write to me so that I understand where the money is". Such kind of verbal and written explanations takes a lot of time, and let no chance for the strategic thinking. And most of working time is occupied by compilation of various information, filling out certificates upon the request of the authorities, the process of contracting, procurement process. Therefore, the actual allocation of time in Russia is virtually not present in strategic management, information management and other activities

The question "What recording bases do you prefer?" has been asked because currently in the normative regulation of the Russian budget accounting there is no concept of accrual accounting. Accrual basis in Russian governmental accounting is declared in the instructions for governmental accounting since 2006. However, in the budget legislation it has been positioned since 2010. Everyone has started to understand it by its own way. Therefore, in discussing the questionnaire results accountants said that the preferred

method is accrual base method only because it is stated in the instructions. The advantages of cash basis and recognize the majority of respondents in Arkhangelsk (55% - see Figure 5). When we asked "What recording bases do you prefer?" Moscow and Arkhagelsk government accountants responded as follows (Figure 5). That is, the majority of Moscow respondents (75%) prefer the accrual method for recognizing in accounting the revenues and expenses. A majority of Arkhangelsk respondents - cash basis (55%). The difference in survey results, probably due to the fact that author was held explanation of Archangelsk respondents about the use and benefits of the cash method before to the survey.

Question "Is it necessary to have value recognition criteria for fixed assets of state institutions?" was made because the Russian governmental accounting lacks value criteria and it is not expected to be used. This means that the fixed assets of all institutions are to be recognised with useful life of 12 months without any value criteria. That is all that is worth more than 1 kopecks (1 kopecks =  $0,0002 \in$  (to 11/12/2010)) and serves more than 12 months.

It is therefore an urgent need to introduce value criteria in order not to include in fixed assets less valuable items and then not to have problems with writing off these low-value, worn out or obsolete assets. But accountants are likely not aware that problems can be solved by writing off such a simple way - by setting the value criteria. And many of them (28% in Moscow and 12% in Arkhangelsk - see Figure 6) respond in the questionnaire as it is written in the Instruction on budget accounting - do not need the value criteria. Ranking of respondents' answers to the question about the value recognition criteria for fixed assets is shown in Figure 6. Thus, the majority of respondents (56% in Moscow against 85% in Arkhangelsk -Figure 6) - for the introduction of value recognition criteria for fixed assets. And it is also can be explained by the historical aspect. Earlier before, the budgetary institutions were using value recognition criteria in their accounting books. For example, from 2000 to 2005 there was the value criterion (Order of the Ministry of Finance of the Russian Federation of 30.12.1999 № 107n "On Approval of Instruction on accounting in budgetary establishments") in the amount of 5000 rubles. Thus, in 2000 - 2005, the fixed assets were recognized in the balance sheet if operation life of it was more than 12 months and with purchasing cost more than 5 000 rubles (5000 rub. =  $122,16 \in (to 11/12/2010))$ ). Comparing the survey results in two Russian regions (Moscow and Arkhangelsk) on the assessment of the changing role of accountants (% of preferences) is presented in Figure 7.

Most respondents (58% and 67%) mentioned as the reason of the changing role of accountants the legal requirements. But the legal requirements for an accountant have not been changed for the last 14 years. Federal Law "On Accounting" was adopted in 1996 and since then has not been drastically changed. Apparently, the respondents had in mind the requirements of the Regulations for the budget accounting. Because these instructions have been changed during last 5 years for 4 times. Thus, this is probably considered as changing legislative requirements. As such the requirements to the role of accountants have not been changed. The organization of accounting in government organizations have been reformed. And in 2011 it will be again modified.

## CONCLUSIONS

Russian public sector accounting has experienced dramatic reforms since year 2004 when accrual accounting was introduced by numerous new accounting instructions for the public sector organizations. These reforms were inspired by "non-local" for Russia ideas found in different international accounting standards and promoted by international organizations through different cooperative projects with the Russian federal government. The reforms were supposed to bring changes to Russian public sector making it more transparent, efficient and accountable though unveiling power of accrual accounting in illuminating use of public sectors resources. In this process, the practicing accountants were supposed to play along. However, after 8 years of reforms, Russia is still earlier in the stage of modernization of accounting practice.

The results of our questionnaire show that the role of government accountants in Russia until now is not developing in the direction of strategic management of the institution. The results also emphasize that governmental accountants remain faithful to the traditional accounting responsibilities - accounting operations, external reporting, invoice processing and so on. Even when they want to improve their competence, even then the tradition of accounting will continue to be vital and will underpin all other activities at all levels of an organization.

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### BIOGRAPHY

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# PREDICTORS AND OUTCOMES OF SPORT EVENT EXPERIENTIAL VALUE (SEEV): INSIGHTS FROM FORMULA 1 PETRONAS MALAYSIAN GRAND PRIX

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## ABSTRACT

Value creation for customers in the form of experiences has been gaining attention remarkably. Providing quality products and services are no longer sufficient for business sustainability, for customers need to bestow upon with satisfactory experiences that they valued. Research on identifying the predictors of customer experiential value and its consequences is sparse. Hence, this paper aims to fill the void by conducting an empirical investigation on predictors of 'sport event experiential value' (SEEV) and in turn, assessing its impacts on total experience and loyalty. Distribution of the survey instrument at the vicinity of the Formula 1 Sepang International Circuit resulted in 225 usable feedbacks. Structural equation modeling procedure was employed to test the hypothesized linkages in the proposed model. Evidence established that all the hypothesized linkages were supported. Implications for future research directions and sporting events organizers were discussed.

JEL MO, M3, M30, M31

KEYWORDS: experiential value, Formula 1, involvement and sport orientation

# **INTRODUCTION**

In today's commodifized economy, marketers realized that products, prices, people and technology are becomingly similar. A potentially significant alternative strategy that could attract consumers' attention must go beyond a product's functional features, benefits and quality and offer instead, a customer experience. It is predicted that customer experience is the next competitive battleground for business success and unsurprisingly, it has been described as the next business tsunami (Colin and Ivens, 2005). Indeed, it has not only emerged as one of the hottest topics amongst top management, but is also becoming an uppermost-prioritized research area in accordance with the customer-orientation philosophy (Mascarenhas, Kesavan and Bernacchi, 2006). Although Pine and Gilmore first introduced the concept in 1998, customer experience has eventually played a prime role in determining the winners and losers in vears to come. However, identifying factors that determine the experience that customer value most and in turn its consequences, remains one of today's key challenging and critical management issues. Colin and Ivens (2005) postulate that customer experience comprises of two elements: physical and emotional aspects and research have unveiled that emotions are the one often being disregarded in the business practices. Recent study has found that these emotions are one of the key differentiators to evoke customers' attention (Mascarenhas et al., 2006). Regardless of the fact that customers' experience plays a critical role in many contemporary discussions among business practitioners and academics scholar, there has been conspicuously few empirical investigations on this emerging concept with notably exception of the seminal work by Mathwick et al., (2006). Against this backdrop, this paper attempts to fill this void with an empirical examination on the core predictors of Sport Event Experiential Value (hereafter called SEEV) and its impacts on total experience and in turn spectators' loyalty. In order to accomplish this objective, valid and reliable multidimensional measures have to be established and validated as suggested by Churchill (1979), Gerbing and Anderson (1988) and Robert (2004). Ultimately, the research's primary

goal is to develop and validate a plausible model that could be characterized as having statistical and explanatory power to exemplify the factors that determine the focal construct, SEEV and subsequently predict its consequences within a motor sport event environment.

The motor sport event environment in this context refers to the prestigious world of Formula 1 (hereafter called F1). This event has the ability to stimulate feelings of excitement, which rush the adrenalins of the spectators. The industry analysts from Formula Money, Deloite Sports Business Group, a Britain based sports business specialist reported that F1's global revenues stood at US\$3.9 billion. This has made F1 the world's highest revenue-generating sports event of the year (StarBizweek, 2009) The amount comprised of commercial rights' revenues such as race sponsorship, corporate hospitality and broadcasts fees; team revenues which include sponsorships and contributions from partners and owners and circuit revenues from ticket sales and sponsorships. The benefits of F1 are abundant and are not only confined to track revenues. In fact, hosting F1 event has also contributed generously to a country's tourism and hospitality sector. Malaysia is second in Asia after Japan to have a F1 track and has remained a value for money destination for many Europeans, who made up the bulk of international audiences at F1 PETRONAS Malaysian Grand Prix (Mahalingam, 2009). F1 is currently the third most watched live sporting event, second to Olympics and the World Cup.

In view of the significance of the research context, the proposed research model is considered novel as it attempts to explore the predictors of SEEV and in turn, its effect on spectators' total experience and ultimately spectators' loyalty. This study contributes to this stream of research by investigating two paths: SEEV–Spectators' Total Experience and Spectators' Total Experience – Spectators' Loyalty which have been overlooked in prior research. The research model and hypothesized linkages are graphically represented in Figure 1.

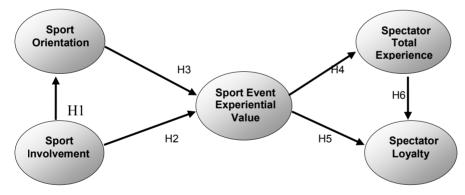


Figure 1: The Research Model and Hypothesized Linkages

# CONCEPTUALIZATION OF CONSTRUCTS AND HYPOTHESES

This section highlights the relevant literature in relation to sport involvement, sport orientation, sport event experiential value (SEEV), spectators' total experience and spectators' loyalty. Examining and synthesizing gaps within the literature review subsequently lead toward the conceptualization of these identified constructs and development of hypotheses as discussed below:

## Sport Involvement

Peter and Olsen (1987) assert that the level of involvement is an important determinant of experiential value within an individual's behavior. Research has indicated that highly involved consumers of sport tend to consume sport activities through event attendance more than those who are not as involved (Stone, 1984). Furthermore, evidence exists that many individuals attending action-sporting events tend to be involved with action sports (Bennett and McColl-Kennedy, 2005). Involvement is said to reflect the degree to which people devote themselves to an activity or event (Peter and Olson, (1987). Building from the existing literature, this study extended the multi-dimensional view of the most commonly used instrument that has been adapted from consumer involvement profile (CIP) scale developed by Havitz and Mannel (2005). They suggest CIP comprises of three dimensions: attraction, centrality and self-expression, which have been shown to be consistently applicable and reliably measured within leisure settings.

#### Sport Orientation

In the multi-billion dollar sports industry, event organizations must incessantly assess how to meet or exceed consumer orientation and experience (Kang and James, 2004). Sport orientation is defined by Pons, Mourali and Nyeck (2005) and Wann (1995) as an individual's specific motives or inherent predisposition toward attending or participating in sporting events. Manifestation of sport orientation could be reflected through the spectators' behaviors. In related literatures on the concept of sport orientation, it is often conjectured to be closely associated with enduring involvement (Pons et al., 2005). For example, an individual might participate in a sporting event for the purpose of group affiliation; which is viewed in marketing literature as the core driver in explaining 'high levels of fan involvement (Wann, 1995). Additionally, Pons et al., (2005) conjecture that the common behavior, sign and values will be shared and displayed conspicuously among the group members not only based on the choice of sport event selected, but also exhibited through the evaluation of their experiences derived from the sport events. Most prior studies in this research strand focused on sport orientation from the perspective of athletes, with notable exception of Greenwell, Fink and Pastore (2002), who examined the impact of goal orientation on the satisfaction of sport event from the lenses of the spectators. Recently, Pons et al. (2005) developed a reliable instrument to measure the concept of orientation towards sporting event (OSE). They unveiled that OSE consist of three core dimensions, which are sensation, cognition and socialization seeking orientation towards sport event. Since then, it was noted that no study has adapted or adopted their scale to validate its generalizability in other sport events or test its applicability within the crossnation context. What more to integrate OSE in a research framework in the mega-sporting event, such as F1 Grand Prix, which has racing circuits in nineteen countries. Following the above rationale, it inspires the authors to propose the following hypothesis:

## *H1:* Sport involvement has a positive effect on sport orientation.

## Sport Event Experiential Value (SEEV)

Sheth, Newman and Gross [18] have indicated that values driving individuals' consumption behaviour has been attributed to functional, conditional, social, emotional and epistemic utility. Customers of today are seeking more value, choices, and subsequently, richer customer experience. In retailing, recent empirical research findings by Keng, Huang, Zheng and Hsu (2007) and Mathwick et al., (2002) have highlighted on the critical role of service experience. They suggest that retailers should focus on creating theatrical retailing environment involving fun, excitement and entertainment, as well as encouraging shoppers to engage actively in the retailing activities. In sports marketing, such an experiential value concept developed by Holbrook (1994) is being appplied, and it relates to personal interaction and physical environmental encounters with the sport event environment as a means of explaining customer loyalty. Furthermore, Holbrook and Hirschman (1982) point out the significant role of the multi-sensory,

imaginary, and emotional aspects of consumption experience in advancing the knowledge of consumer behavior. Accordingly, Wakefield and Blodgett (1999) assert that tangible physical environment plays a pivotal role in generating excitement in sport event settings and excitement in turn, influences spectator loyalty. In this research context, sport event experiential value (SEEV) reflects the means through which spectators evaluate the level of service provided by event organizers, atmospherics condition in the vicinity of the circuit, entertainment value derived from the event and enjoyment experienced when interacting with other spectators during the event itself. Bitner and Brown (2000) claim that level of experience value might influence customer satisfaction, and loyalty. Following the above, it is plausible to put forward the next two hypotheses as identified below:

- H2: Sport involvement has a positive effect on sport event experiential value.
- H3: Sports orientation has a positive influence on sport event experiential value.

#### Spectators' Total Experience (STE)

Total customer experiences are the key driver in generating lasting customer loyalty in today's businesses (Mascarenhas et al., 2006). In sports marketing, this can be translated into the overall experiences of spectators upon attending any sports-related events. Spectators' total experience is conceptualized as fulfilling physical and emotional experience when spectators interact with event organizer. The positive experience might influence spectators' loyalty (Mascarenhas et al., 2006). Russell and Pratt (1980) assert that emotions consist of two independent dimensions: pleasure and arousal. Pleasure refers to the level at which a person feels well, happy or content in a situation, while arousal refers to the extent to which a person feels stimulated and active. Past research by Mano and Oliver (1993), Westbrook, (1987) and Westbrook and Oliver (1991) accentuate the established relationship between pleasure and arousal when attending the event. It was unravelled that the more pleasure the subjects experienced during the event, the higher will be their loyalty. Hence, we postulate that:

## *H4: SEEV* has a positive effect on spectators' total experience

#### Spectators' Loyalty

Jacoby and Chestnut (1978) suggest that defining loyalty based on repeated buying behaviour is unwise. In marketing, customer loyalty is often associated with a brand (Mascarenhas et al., 2006). According to their perspective, a brand conceptually refers to a name, term, sign or symbol, or design, or a combination of both, which are intended to identify and differentiate the goods or services of one seller from those of competitors. In addition, Kotler (1973) states that acquring brand loyalty would give sellers more competitive protection and greater control in devising and planning marketing programs. Oliver (1999) on the other hand, agrees that a customer's loyalty must be measured further by analyzing his or her beliefs, affects, and experience. In this research context, loyalty is seen as behavioural in nature as distinguished by Chaudari and Holbrook (2001). Behavioral loyalty reflects loyalty in terms of revealed purchase and usage behavior that is normally based on customer satisfaction and measured by past purchasing of one's brand and/or competing brand (Mascarenhas et al., 2006). Hence, in sports marketing, loyalty may be determined by spectators' probable inclination towards the provider or event organizers, prompting the authors to postulate the following hypotheses:

## H5: SEEV has a positive influence on spectators' sport loyalty.

*H6: Spectators' total experience has a positive effect on sport loyalty.* 

## **RESEACH METHODOLOGY**

350 questionnaires forms were distributed to F1 sports spectators during Formula 1 PETRONAS Malaysian Grand Prix 2010 at Sepang International Circuit in Malaysia. Data collection was personally

administered by researchers by intercepting potential respondents within the circuit's vicinity. During this exercise, the researchers approached respondents to illicit interest in survey participation and explained the research objectives. The researchers remained in the vicinity until respondents had completed the survey and interact with them only at a time where and if any minor clarification was needed. Respondents were given approximately fifteen minutes to complete it. Upon completion, the respondents were given souvenirs as a token of appreciation of their voluntary participations in the study. This data collection technique has resulted in 225 usable survey questionnaires for data analyses. A seven-point Likert scale has been employed for all the measures used in the study except demographics profile and travel behavior sections. The measures were mainly adapted from previous research such as Keng et al., (2007), Mathwick et al., (2002) and Pons et al., (2005). The data were initially assessed to detect outliers and normality then descriptive analyses were performed. Subsequently, data were analyzed to determine the goodness of data in terms of reliability and validity by following guidelines offered by Anderson and Gerbing (1988) and Gerbing and Anderson (1988).

## RESULTS

#### **Demographics Profile of Respondents**

Table 1 presents the profile of respondents, 74.2 percent were male, the majority of which fall in the age category of 21 to 40 years (83.1 percent). Interestingly, high proportion of the sample comprises of international spectators (66.2 percent) of which 39% were European, and 77.4 percent has attained tertiary education.

#### Exploratory Factor Analysis (EFA)

Three exploratory factor analyses (EFA) were conducted separately on SEEV (Table 2), Sport Orientation (Table 3) and Sport Involvement, Spectators' Total Experience, and Spectators' Loyalty (Table 4). The EFA used principal components extraction with varimax rotation. It is the most commonly used analytical technique for reducing a large item pool to a more manageable set. It has been recognized to be a valuable preliminary analysis when no sufficient theory is available to establish the underlying dimensions of a specific construct (Sharma, 1996).

Variable	Description	Frequency	Percentage
Gender	Male	167	74.2%
	Female	58	25.8%
Age	< 20 years old	15	6.7%
•	21 - 30 years old	117	52.0%
	31 - 40 years old	70	31.1%
	41 - 50 years old	21	9.3%
	51 - 60 years old	2	0.9%
Highest	High School	51	22.7%
Academic	Undergraduate	121	53.8%
Achievement	Post graduate	53	23.6%
Nationality	Malaysian	76	33.8%
-	ASEAN (Indonesian, Brunei,	31	13.8%
	Singapore and Thailand)		
	European	58	25.8%
	North & South America	13	5.8%
	Africa	12	5.3%
	Australia/New Zealand	12	
	Far East (China /Japan/Ko	5.3%	
	Taiwan)	23	10.2%

## Table 1: Respondents' Demographic Profile

Table II shows the results of EFA for SEEV. In assessing the initial factor structure of SEEV, all the 32 items were analyzed using EFA. It displays the result for both Bartlett test of sphericity ( $\chi^2$  of 4520.82, df = 231 at p = 0.001) and the Kaiser-Mayer-Olkin measure of sampling adequacy (KMO = 0.94). This indicates that there are sufficient inter-item correlations with the data for performing factor analysis. Sharma (1996) suggests that the cut-off level for the KMO statistic should be greater than 0.8, but a value of 0.6 is tolerable. A six-factor solution was extracted; however, this initial purification exercise resulted in the deletion of 10 items on the basis of failing to fulfill the above mentioned criteria. In summary, the results reveal that SEEV construct comprises of six factors, which are labeled as esteem, entertainment, economy (customers' return on investment), social, service and aesthetics.

Table 2: Final Exploratory Factor	Analysis for Sport Event Experiential Value (S	SEEV)

Sport Event Experiential Value Items	F1	F2	F3	F4	F5	F6
1. The F1 circuit is aesthetically appealing		0.73				
2. The motor exhibition displays products attractively		0.82				
<ol> <li>The signage and electronic board at F1 Grand Prix is visually eye-catching</li> </ol>		0.73				
4. The layout design of the F1 circuit makes it easy to get around		0.65				
5. Overall, the atmosphere at F1 Grand Prix circuit is stimulating		0.61				
6. F1 provides great entertainment			0.69			
7. F1 is a fun way to spend time			0.73			
8. Attending F1 is fun			0.82			
9. When I think of F1, I think of excellence event			0.73			
10. F1 Grand Prix staff are responsive on request						0.72
11. F1 Grand Prix at staff are knowledgeable						0.69
12. F1 event is an opportunity to make friends with people who share					0.7	
the same interest					0.67	
13. Attending F1 with my friend or family is a bonding experience					0.75	
14. I got my money's worth for attending F1				0.67		
15. I am happy with F1 price ticket				0.84		
16. Overall I feel F1 ticket is of a good economic value				0.80		
17. The thrill of F1 performance "gets me away from it all"	0.67					
18. The excitement of F1 makes me forget my problems	0.70					
19. My friend would think highly of me if I attend F1 event	0.79					
20. My social status will be enhanced when I attend F1 event	0.76					
21. F1 is a prestigious event	0.61				ĺ	
22. I feel proud attending F1 event	0.67					

Table 3 demonstrates the results of the second EFA. Two factors emerged from 14 items, which contravene expected outcome of three factors. It was noted that all items (4) to represent the third expected factor which is social seeking sport orientation did not converge into the third factor and the items fall into sensation factor with high cross loading with cognition seeking orientation. The result reveals that the KMO statistic of sampling adequacy was 0.87. However, this initial purification exercise resulted in the deletion of eight items on the basis of high cross-loadings (greater than 0.40) on multiple factors. This result implies that sport orientation comprises of two factor structures, which are sensation seeking and cognition seeking.

Table 3: Final Ex	ploratory Factor	Analysis for S	port Orientation

	Sport Orientation Items	Sensation	Cognition
		Seeking	Seeking
1.	attending sport event is real pleasure	0.81	
2.	always excited when going to this sport event	0.90	
3.	always enthusiastic when thinking about attending this	0.86	
event			
4.	attending this sport event, I feel part of the event	0.80	
5.	happy when I can attend this event	0.78	
6.	consider myself as a motor sport expert		0.82
7.	can talk about tactic and strategies like a professional		0.87
8.	I know very little about motor sports		0.70

Table 4 depicts the third EFA results, which illustrates that there is three factor-structure emerged from these three constructs: sport involvement, spectators' total experience and spectators' loyalty, totaling 25 items. The result reveals an adequate sampling adequacy based on the KMO statistical value of 0.95. The initial purification exercise resulted in the deletion of 1 item in sport loyalty construct on the basis of high cross loadings (greater than 0.40) on multiple factors.

## **Confirmatory Factor Analysis**

As argued by Gerbing and Anderson (1988) item-total correlation, alpha coefficient and exploratory factor analysis procedures could not ensure unidimensionality of measures, which is viewed as an important requirement of valid measurement. They strongly recommend that a more rigorous statistical procedure be employed to refine and confirm the factor structure generated from the initial EFA. Confirmatory factor analysis (CFA) has been proposed as an analytical tool to ascertain unidimensionality of measures (Gerbing and Anderson, 1988).

Table 4: Final Exploratory Factor Analysis for Sport Involvement, Spectators Total Experience and Spectators Loyalty

Me	asurement Items	Sport Involvement	Spectators Total Experience	Spectator Loyalty
1.	interested in F1	0.70		
2.	involvement with F1is high	0.83		
3.	expert in F1	0.82		
4.	strong supporter of F1	0.85		
5.	enjoy following coverage of F1	0.77		
6.	well-informed about F1	0.83		
7.	F1 matters to me a lot	0.89		
8.	enjoy discussing F1	0.86		
9.	unhappy-happy		0.70	
10.	unenjoyable-enjoyable		0.74	
11.	unsatisfactory-satisfactory		0.76	
12.	dull-fascinating		0.77	
13.	not fun-fun		0.77	
14.	boring-interesting		0.79	
15.	unpleasant-pleasant		0.83	
16.	terrible-delighted		0.85	
17.	monotonous-sensational		0.83	
18.	calm-excited		0.78	
19.	unarousal-arousal		0.78	
20.	relaxed-stimulated		0.73	
21.	not safe-safe		0.72	
22.	come again to F1 PETRONAS Grand Prix in the future			0.75
23.	recommend F1 PETRONAS Grand Prix to friends/relatives			0.75
24.	desire to attend F1Petronas Grand Prix event again in			0.75
f	uture			
25.	F1 PETRONAS Grand Prix is my first preference			0.66

Hence, in line with this suggestion, all the resulting measures derived from EFA were validated using a CFA analytic procedure by employing the AMOS 18 analytical program. In order to achieve an acceptable ratio of observations to estimate parameters, it proved necessary to run three separate measurement models; the fit indices suggest that these models fit the data well. The first measurement model are as follows: the fit statistics were  $\chi^2 = 468.64$ , df = 194,  $\chi^2/df = 2.41$ , p< 0.001; RMR = 0.079; IFI = 0.94; CFI = 0.94; and RMSEA = 0.08. All indicators loaded heavily on the construct and have *t*-values greater than

13.95 and all standardized coefficient are greater than 0.50. The second measurement model comprises of sport orientation construct with two-factor structure. The fit statistics were  $\chi^2 = 21.16$ , df = 12,  $\chi^2/df = 1.76$ , p< .048; RMR = 0.08; IFI = 0.99; CFI = 0.99; and RMSEA = 0.06. Items loaded heavily on their posited constructs and have t-values greater than 7.35 and all standardized coefficient are greater than 0.50. The third measurement model comprises of Sport Involvement, Spectators' Total Experience and Spectators' Loyalty.

The fit statistics were  $\chi^2 = 327.25$ , df = 235,  $\chi^2/df = 1.39$ , p< 0.001; RMR = 0.07; IFI = 0.98; CFI = 0.98; and RMSEA = 0.04). Items loaded heavily on their posited constructs and have *t*-values greater than 8.23 and all standardised coefficient are greater than 0.50. In essence, all the items in the three measurement models have achieved convergent validity. The widely accepted cut off value for factor loading is when the t-values are greater than  $\pm$  1.96 or  $\pm$  2.58 at 0.05 or 0.01 levels respectively and standardized factor loading of 0.5 and above as recommended by Anderson and Gerbing (1988). Construct validity was assessed in terms of convergent and discriminant validity. Convergent validity is established through high correlations between the measure of interest and other measures that are supposedly measuring the same concept (Aaker, Kumar and Day, 2007). The critical ratio (t-value) of the items in the three measurement models were  $\pm$  1.96 or  $\pm$  2.58 at 0.05 or 0.01 levels respectively and standardized factor loading of 0.5 and above. Thus, the convergent validity of the constructs was upheld (Anderson and Gerbing, 1988). Alternatively, discriminant validity can also be established through low correlations between the constructs and it is evident, when the correlation between factors was lower than 0.80 (Klein, 2005) and (Yanamandram and White, 2006). Discriminant validity is achieved as the correlation coefficients ranging from 0.53 to 0.71. For a rigorous test of discriminant validity according to Fornell and Larcker (1981), the AVE of each construct was computed and found to be greater than the squared correlation between the construct and any other constructs in the model. A complementary assessment of discriminant validity was conducted to determine whether confidence interval of  $(\pm 2 \text{ standard errors})$  around the correlation estimated for each pair of constructs includes 1 (Anderson and Gerbing, 1988). The result illustrates that this criteria has been achieved satisfactorily. In conclusion, it is reasonable to claim that all the measures used in the study possess adequate psychometric properties.

Table 5 presents the summarized results of measurement models, which include correlation matrix, mean value, Cronbach's alpha, composite reliability and Average Variance Extracted (AVE). Construct reliability was also assessed by estimating the AVE, which reflects the overall amount of variance captured by the latent construct and Composite Reliability (CR). CR reflects the internal consistency of the construct indicators, while AVE reflects the amount of variance captured by the construct indicators (Hair, Babin and Anderson, 2010). All CR scores ranging from 0.85 – 0.93, were much higher than the recommended cut-off point of 0.7 (Olorunniwo, Hsu and Udo, 2006). Thus, each of the factors reliably measured its respective constructs. The AVE scores ranged from 0.60 to 0.72, exceeding the recommended cut-off point of 0.5 (Fornell and Larcker, 1981). It is important to note that Cronbach's alpha, the customary index of reliability was assessed after unidimensionality of a measure has been established; this was in line with the suggestion proposed by Anderson and Gerbing (1988). A commonly used threshold value of 0.70 (Nunnaly and Bernstein, 1994) was used; however (Hair, Anderson and Black, 1998) suggest that values slightly below 0.70 are acceptable if the research is regarded as exploratory.

## Structural Model Analysis

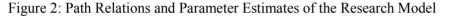
Subsequently, structural equation modeling (SEM) was utilized to test the six hypothesized relationships among the constructs postulated in the proposed model (Figure 1). Because of sample size constraints, composite means were constructed for all the scales and these indices were used as new variables in data set (Settoon, Bennett and Liden, 1996). As recommended by MacKenzie and Lutz's (1989), for latent

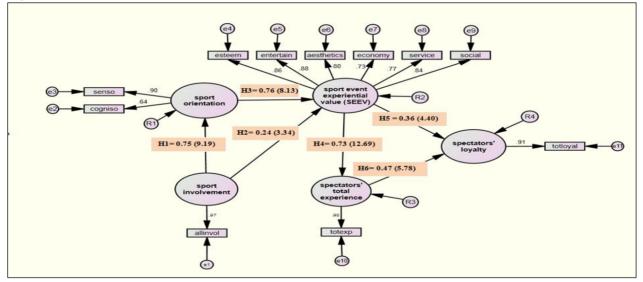
construct with one dimension, its loading (lamda) is fixed to be the square root of its reliability, and the error term is set at one minus the construct reliability. Figure 2 demonstrates the estimated standardized path coefficients and critical ratio (in parenthesis) for the hypothesized links.

Table 5: Correlation matrix, squared correlation, Average Variance Extract, Mean Value, Square Multiple Correlation, Cronbach's Alpha and Composite Reliability

Construct	F1	F2	F3	F4	F5	Mean Score	Standard	Cronbach's Alpha	Composite Reliability
Sport Involvement (F1)	0.60					4.94	Deviation 1.28	0.90	0.93
Sport Orientation (F2)	0.70	0.65				4.98	1.03	0.93	0.86
Sport Orientation (12)	$(0.49)^{a}$								
Sport Event Experiential Value (F3)	0.71	0.70 (0.49) <sup>a</sup>	0.66			5.09	0.96	0.92	0.91
	$(0.50)^{a}$	. ,							
Spectators' Total Experience	0.55	0.63	0.71	0.68		5.59	1.00	0.96	0.90
(F4) Spectators' Loyalty (F5)	$(0.30)^{a}$ 0.54 $(0.29)^{a}$	$(0.40)^{a}$ 0.53 $(0.28)^{a}$	$(0.50)^{a}$ 0.63 $(0.40)^{a}$	0.66 (0.44) <sup>a</sup>	0.72	5.40	0.99	0.84	0.85

Note: "Squared Correlation is presented in parenthesis, Average Variance Extracted (AVE) is presented on the diagonal axis





The structural model has a significant  $\chi^2$  value ( $\chi^2 = 58.30$ , df = 32,  $\chi^2/df = 1.82$ , p< 0.003), indicating inadequate fit of the data with the hypothesized model. This is to be expected as in practice this statistic is very sensitive to sample size (Klein, 2005) and (Ullman, 2006). Hence, the other fit indices were employed (GFI = 0.96; RMR = 0.03; AGFI = 0.91; CFI = 0.99; IFI = 0.99; NFI = 0.97; RMSEA = 0.06) suggest that the model fits the data satisfactorily. Therefore, the study's objective to establish a plausible model that has statistical and explanatory power which could permit confident interpretation of results was thus successful. Results of the tested hypotheses are reported in Table 6.

## CONCLUSION

The result in Table 6 demonstrates that all the hypothesized linkages were supported. It delineates a few key implications such as sport involvement has a significant effect on sport orientation (H1) and in turn,

sport involvement has a positive influence on SEEV (H2). The findings confirm that sport orientation has significant positive effect on SEEV (H3). Thus, the results established that sport involvement and sport orientation are significant predictors of SEEV, and consequently, spectators' total experience (H4) and spectators' lovalty (H5) are outcomes of SEEV. Importantly, this study reveals that SEEV could directly influence spectators' lovalty towards F1 PETRONAS Grand Prix (see H5): although spectators' lovalty could also be realized via spectators' total experience (see H6). However, spectators' total experience has a greater impact on their loyalty as compared to SEEV. Overall, the finding of the study accentuates that F1 management stands to gain by placing extra emphasis on enhancing SEEV, as it has a direct positive significant impact on spectators' total experience, and ultimately sport loyalty. Thus, motor sport organizers and other related sector such as hospitality and Tourism Board could gain competitive advantage and above all business sustainability by devoting resources in enhancing and fulfilling their spectators' expected experiential value, which should be congruent with their sport orientation and underlying motives of attending the sporting events. Moreover, identifying the predictors of SEEV would enable event managers to create a wonderful and memorable experience, which is critical and perhaps would provide an effective competitive weapon in the face of intense competitions from other sport events. It seems reasonable to speculate that spectators that had a memorable and great experience will ultimately increase their loyalty towards F1 Grand Prix the sporting event. Undoubtedly, sport events are no longer merely offering good sport. Today mega-event such as F1 becoming major revenue generating tool which entails spillover effect to local and regional economic development (Mahalingam, 2009). Therefore, it is vital that organizers attract and drawn in as many spectators as possible in order to gain maximum economic impact.

	Hypothesized Path	Standardized Coefficient	Construct Reliability (t-value)	Results
H1	Sport Involvement — Sport Orientation	0.75	9.19	Supported
H2	Sport Involvement — Sport Event Experiential Value	0.24	3.34	Supported
H3	Sport Orientation — Sport Event Experiential Value	0.76	8.13	Supported
H4	Sport Event Experiential Value — Spectators' Total Experience	0.73	12.69	Supported
H5	Sport Event Experiential Value — Spectators' Loyalty	0.36	4.40	Supported
H6	Spectators' Total Experience - Spectators' Loyalty	0.47	5.78	Supported

A major criticism of the study concerns external validity as the respondents were not selected based on random sampling, but rather on convenient sampling. This limitation thus may not be an accurate representation of the spectators of F1. However, it is conceivable to speculate that those who were at the vicinity of F1 circuit during the qualifying and final race days could be somehow have the interest and experience required by this study. On this argument, the results and interpretations might be generalizable, specifically in the context of motor sport events. In fact, Ferber (1977) suggests that there is no place for probability samples in basic or applied consumer research. A second pertinent weakness concerns the cross-sectional research design used. Longitudinal research is required to capture the dynamic nature of customer post-consumption behavior. Nevertheless, efforts to test the present model through sagacious longitudinal research would require an enormous amount of sustained cooperation by consumers serving as key informants over time. Sample attrition through time could be considerable. The limitations of the present research provide opportunities for further research direction. It may be fruitful for future research to replicate and validate all or parts of the current model, in order to determine the robustness of the findings in other sporting event settings. Apparently, comparative cross-national studies are essential in order to examine the generalizability of the model. This research direction appears to be potentially fertile because F1 is a global motor sport event; hosted in nineteen countries with extensive global audiences. In addition, the evidence of the plausibility of the two important links-SEEV to spectators' total experience and SEEV to spectators' loyalty-would require validation in other sport events. It is also deemed particularly important that future study be undertaken to extend the present model by integrating other pertinent constructs in sporting events such as identity salience and motivation.

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# COMPARISONS OF SOFT DEBT FINANCING PROBLEMS IN CHINA ANC KOREA

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# ABSTRACT

Using a combined panel data of Chinese and Korean non-financial firms from 2000 to 2007, we study the effects of governments' influence on the banking sector in their decision making, and other financial and non-financial traits of firms in the two countries on the borrowing behaviors of firms. We specifically test whether there are so-called soft budget constraint (SBC) problems in China, where banks are supposed to be under the guidance of the central government for the welfare of the people at the expenses of profits and efficiency of firms, compared with the case of Korea. For this, we estimate default risks of firms and compare the effects of default risks and other factors on bank financing of firms in two countries. We find that while firms in Korea known to have experienced SBC before the financial crisis occurred in late 1997 have been under hard budget constraints since year 2000, and that those in China are exposed to SBC problems. The results support our theoretical studies about the effects of reputation of lenders on SBC in a centralized and decentralized economy in toughening budget constraints. We also have found that factors affecting bank financing in China and Korea are quite different. Most strikingly, Chinese firms with better cash flows from operation obtain more bank loans, while such Korean firms resort less to bank financing. In addition, while Korean firms paying higher interest rates finance more loans from banks, while such Chinese banks finance less from banks. This might imply that for firms in Korea and China might have different sources of financing in the times of high interest rates or in the case of high risk premium asked.

JEL: G31, G32

KEYWORDS: Soft Debt Financing, Default Risks, Firm-Level Tests, China, Korea

# INTRODUCTION

In the transitional economies like Russia and China which put higher priorities on welfares of their people than more market-based economies do, their governments are more likely to bail out firms or banks due to political reasons at the expenses of economic efficiency. According to Kornai (1979, 1980), a socialistic economy might experience an inherent problem of soft budget constraint (SBC hereinafter) due to political reasons. However, the key problem of soft budget constraint may exist even in the market economic or non-economic. For examples of micro-level cases in market economies, we have seen such bailouts of banks like S&Ls and AIG and corporations like GM and Chrysler. Alexeev and Kim (2008) showed, based on firm level data, that a severe soft budget constraint problem existed in Korea national economies and firms that are softly budgeted for short term whitewash treatments can end up with the collapse of the national economy and defaults of firms respectively in the long run, by not observing financial disciplines strictly, the concept of soft debt financing problems is of critical importance with respect to governance system of a national economy and banking system as well as capital budgeting of a firm. According to Alexeev and Kim (2008), most studies on this topic have

focused on the existence and severity of such problems in the transitional economies. Our study on this topic is different from our previous work in many ways. First, we formally test the existence of soft budget constraint in China for the first time. Second, we formally test the existence of soft budget constraint in Korea, using quite different approach adopted by Alexeev and Kim (2008). Third, eventually we first test the existence and severity of soft budget constraint in the centralized economy and decentralized economy with firm level data in two types of countries with a sufficiently long horizon enough to measure them in the long run, as assumed in the theory models. This study proceeds as follows. In Section III, we introduce data set and estimate a baseline default model, and then formally test out hypotheses on SBC with firm data of China and Korea following literature review in Section III. In Section IV, we summarize test results and conclude our study.

#### LITERATURE REVIEW

According to Janos Kornai (1980, 1986), an enterprise or any organization is said to have a soft budget constraint when it expects to be bailed out in case of financial distress. The concept of SBC originally developed by Kornai (1979, 1980) was modeled in a game-theoretic framework by Dewatripont and Maskin(1995). Dewatripont and Maskin (1995) pointed out that the fundamental reason for the soft budget constraint problem is the inability of rescuers to commit to no bailout ex ante. Majumdar (1998) studied soft debt financing problems in state-owned enterprises. The relationship between the availability of investment funds and the profitability of firms is studied by Grosfeld and Roland (1997), and Lizal and Svejnar (2002). They all find that the relationship is negative, because firms use funds for investments inefficiently for survival rather than for restructuring. Using data on industrial firms in the Czech Republic, Lizal and Sveinar (2002) study investment behaviors of firms depending on their ownership structure, and find that large state-owned and private firms operate under SBC, given a large volume of nonperforming bank loans to firms and their high rate of investments. Maskin and Xu (2001) and Kornai et al. (2003) provide detailed surveys and references on SBC. The latter source surveys both empirical and theoretical literature. They report that most of previous studies are theoretical. While most of empirical studies are to determine the level of soft debt financing problems in the economies in transition, Alexeev and Kim (2008) represent the only published study of soft debt financing problems in a market economy, outside of the economies in transition. Alexeev and Kim (2008) claim that Korea firms were like firms in economies in transition like China in that it suffered a widespread phenomenon of soft budget constraint(SBC) before the financial crisis in late 1990s. However, they did not prove whether firms in economies in transition like China actually suffer a widespread phenomenon of soft budget constraint (SBC). While there are some empirical studies in soft debt financing problems, the most important topic has been its effects on the profitability of firms. Among theoretical papers, Huang and Xu (1999) construct a model that demonstrates how the SBC could have led to a crisis in Korea. Furthermore most theoretical studies on the soft budget constraint are to prove the existence and inefficiency of the phenomena, just like empirical ones are for the same purpose in the economies on transition. We in this study examine whether there exists a soft budget constraint problem in the People's Republic of China (China, herein after), and compare the severity and effects with those of Korea. In doing so, we actually empirically test on main propositions claimed by Alexeev and Kim (2009). Specifically, we test (1) whether the soft budget problems exists in an economy in transition with the case of China, (2) whether the soft budget problems exists in a market economy, (3) whether the competition among banks in the banking sector can reduce the severity of soft debt financing problems, if any, (4) and whether the inefficiency of soft debt financing problems could be a problem in the economies in terms of quality of firms.

#### DATA AND EMPIRICAL TESTS Data

We use a combined dataset of Chinese and Korean non-financial firms. For Chinese firms, we use RESSET/DB for Chinese firm data. For Korean firms, we use the database provided by Korea Information Services, called KIS-VALUE for Korean firms. We use an unbalanced panel dataset of annual data from 2000 to 2007. Accounting data, the number of employees, the date of establishment, shareholder's ownerships and market values are obtained directly from the respective dataset. All other ratios variables are calculated for our study based on the definitions provided in Table 1. We use previous vear data to avoid endogeneity problem between year-end values and periodic data. Since not all the variables are available for all firms in the dataset, the numbers of observations are not same across regressions. Firms are reported as defaulted in the year when they filed for bankruptcy or went bankrupt or out-of-operation, or rejected loans from banks to avoid bankruptcy. Firms merged with or acquired by other firms are not included as defaulted firms as long as they actually have never defaulted prior to the mergers and acquisitions. Since the Chinese banking system (China: dummy variable) is more or less owned and controlled directly by the Chinese government and indirectly by the government owned firms, it seems to suffer more from soft debt financing problems, thus less likely to default bad quality firms. We expect a negative relationship between government ownership (Govt SH) and banks' ownership (Bank SH), and default risks for firms, especially in the case of Chinese firms in the existence of soft debt financing problems, vice versa. Another important bank governance issue is the role of foreign ownership (Fgn SH). We expect negative effect of foreign ownership, in that foreigners are less subject to moral hazards, non-economic decision makings. Thus, we study the effects of ownership, such as the ownership of the government (Govt SH), foreigners (Fgn SH), the owner (First SH) and the banks (Bank SH). We also include many other factors to see and control for their effects on soft debt financing problems as shown in Table 1. Largest shareholders (First SH) are supposed to decrease agency costs and induce higher profitability of banks (EATR).

Table 1: Variables and Descriptions

Note: Dates are same for the nominator(s) and the denominator(s), unless specified.

The ownership of foreign investors (Fgn\_SH) can also play an important role in corporate governance of banks because the ownership of foreigners might reflect that the management of the firms are subject to global standards in operation, accounting and financial information. The different governance systems in

two countries might result in different policies in financial decision making of banks to firms. Firms with more stable and clear governance systems will be less likely to default and more likely to have softer bank financing. The number of employees (Employee) of a firm is expected to have some relationship with soft debt financing problems in China. We also include some other factors such as the age (Age) of firms since their establishments, retained earnings to total asset ratio (RER), fixed assets plus investment assets to total assets ratio (Fixed\_R), investment to asset ratio (Investment\_R), interest expenses to debts ratio (Interest\_R), bank loans to assets ratio (BLR), debt to asset ratio (Debt\_Asset\_R), and Tobin q (Market Value/(Market Value + Total Debt).

Variables		China	a		Korea	l
variables	Obs	Mean	Std.	Obs	Mean	Std.
Default	5096	0.062	0.242	4298	0.015	0.120
Age	5096	7.786	4.144	4298	29.982	14.997
Govt_SH	5096	0.456	0.210	4298	0.004	0.026
First_SH	5096	0.452	0.175	4298	0.210	0.175
Fgn_SH	5096	0.002	0.023	4298	0.052	0.126
Bank_SH	5096	0.005	0.015	4298	0.049	0.084
Employee	5096	3527	5940	4298	877	3674
Total_Asset	5096	3.010	7.660	4298	558.3	3382
Debt_Asset_R	5096	0.474	0.178	4298	0.423	0.291
Fixed_R	5096	0.457	0.165	4298	0.533	0.182
Sales_R	5096	0.850	0.593	4298	0.798	0.615
EATR	5096	0.036	0.082	4298	0.015	0.279
RER	5096	0.046	0.040	4298	0.168	0.205
Tobin_q	5096	0.681	0.331	4298	0.307	0.285
BLR	5096	0.751	0.343	4298	0.325	0.239
Invest_R	5096	0.111	0.163	4298	0.466	0.744
Interest_R	5096	0.059	0.057	4298	0.039	0.031

Table 2: Summary Statistics of Variables for Chinese and Korean Firms

Note: 1. Some observations with outliers are not included for calculations of means.

2. Total assets are in billions in their currencies (Yuan and Won for China and Korea respectively).

We expect the likelihood of default is higher for a firm with a higher debt ratio or lower owners' equity ratio. For factors representing efficiency in sales, we introduce the turnover ratio (Sales R). We also introduce interest expenses (Interest R) to reflect risk premium due to high risks. Due to the monopolistic financial market structure, we may expect Chinese firms pay higher interest rates (Interest R) for loans, compared with Korean firms. In Table 2, we provide summary statistics of some variables used in this study for firms in two countries. As expected, we can see differences in averages and standard deviations of most variables between the two countries, possibly due to significant differences in financial market system, corporate governance and business environment. The profitability ratio measured by earnings after taxes divided by total assets (EATR), age (Age), firm size measured by the number of employees (Employee), total assets (Total Asset), and many other ratios like fixed ratios (Fixed R), Tobin q (Tobin q), etc. We will discuss the differences in more details later with formal group mean test statistics. Table 3 shows pair-wise correlation coefficients for most variables used in the study for the two countries, combined and separately for each country. As in the case of most other studies, most variables representing the financial status and performances of banks are more or less closely correlated with each other. For Chinese firms, the ownership of the Chinese government (Govt SH) has a positive relationship with the number of employees (Employee), total assets (Total Asset), turnover ratio (Sales R) and profitability (EATR) and a negative relationship with leverage ratio (Debt\_Asset\_R) with statistical significance.

All	Govt_SH	Employee	Total_Asset	Debt_Asset_R	Fixed_R	Sales_R	EATR	BLR
Govt_SH	1							
Employee	0.276***	1						
Total_Asset	-0.097***	0.268***	1					
Debt_Asset_R	0.089***	0.053***	0.006	1				
Fixed_R	-0.148***	0.026**	0.029***	0.056***	1			
Sales_R	0.030***	0.105***	0.005	0.334***	-0.159***	1		
EATR	0.044***	0.018	0.005	-0.210***	-0.078***	0.110***	1	
BLR	0.499***	0.146***	-0.082***	0.133***	0.178***	-0.011	-0.044***	1
Interest_R	0.171***	0.076***	-0.022**	-0.005	0.027**	-0.018	-0.032***	0.190***
China	Govt_SH	Employee	Total_Asset	Debt_Asset_R	Fixed_R	Sales_R	EATR	BLR
Govt_SH	1							
Employee	0.111***	1						
Total_Asset	0.105***	0.632***	1					
Debt_Asset_R	-0.029*	0.070***	0.056***	1	1			
Fixed_R	0.020	0.126***	0.122***	0.056***	1			
Sales_R	0.043**	0.149***	0.139***	0.127***	-0.116***	1		
EATR	0.051***	0.037**	0.072***	-0.292***	-0.074***	0.264***	1	
BLR	0.008	0.029**	0.111***	0.206***	0.544***	0.094***	-0.059***	1
Interest_R	0.007	0.033**	0.097***	-0.309***	0.059***	0.025*	0.175***	0.017
Korea	Govt_SH	Employee	Total_Asset	Debt_Asset_R	Fixed_R	Sales_R	EATR	BLR
Govt_SH	1							
Employee	-0.004	1						
Total_Asset	-0.010	0.656***	1					
Debt_Asset_R	0.048***	0.009	0.019	1				
Fixed_R	0.041**	-0.018	0.002	0.014	1			
Sales_R	0.047***	0.029*	0.013	0.488***	-0.292***	1		
EATR	0.034*	-0.027	0.016	-0.207***	-0.087***	0.054***	1	
BLR	-0.049***	-0.019	-0.029	0.315***	0.066***	-0.013	-0.155***	1
Interest_R	-0.010	-0.002	0.001	0.564***	0.096***	-0.050***	-0.287***	0.408***

Table 3: Correlation Matrix for Variables for Chinese and Korean Firms

Note: 1. Coefficients are statistically significant at 10%, 5% and 1% level for \*, \*\* and \*\*\* respectively. 2. P-values are for two-tailed tests.

On the contrary, the ownership of the Korean government (Govt\_SH) has a positive relationship with turnover ratios (Sales\_R), profitability (EATR), leverage ratio (Debt\_Asset\_R) and fixed ratios (Fixed R), but a negative relationship with bank loan ratio (BLR) with statistical significance.

While the number of employees (Employee) and total assets for Korean firms do not show any relationships with statistical significance, except a positive relationship between the two variables (Employee and Total\_Asset), Chinese firms show close relationship of the two variables with other variables used in the study. Leverage ratio (Debt\_Asset\_R) and interest rate (Interest\_R) also show strong correlations with other variables. We here skip further explanations of the table for simplicity. Such high correlations among variables require us to pay more attention to multicollinearity among explanatory variables in setting up models and testing to acquire reliable results. In Table 4, we report the test results for group mean differences assuming unequal variances between groups. We can see group means of variables for Chinese and Korean firms are statistically different. As we have seen before, Chinese firms are younger, higher in leverage ratio (Debt\_Asset\_R), more bank loans (BLR), more investments (Invest\_R), higher profitability (EATR) and more workers per firm (Employee) than Korean firms. They are owned more by the government (Govt\_SH) and controlled by the largest shareholder (First\_SH), less by foreign investors (Fgn\_SH) and banks (Bank\_SH) than Korean firms. They are better in sales

efficiency (Sales\_R) with less illiquid assets (Fixed\_R) and have retained their earnings less (RER) yet than Korean firms while their relative market values (Tobin-q) are higher, suggesting their growth potentials valued by the investors in the stock market are better. In Table 5, we report the number of firms that defaulted in both countries year by year. From the table, we can see that there is not much difference in the number of defaults in China and Korea.

Variable -	Cł	nina	Ko	orea	Difference	p value
variable -	Obs	Mean(A)	Obs	Mean(B)	(A-B)	p_value
Age	5096	7.786	4298	29.982	-22.197	0.000
Govt_SH	5096	0.456	4298	0.004	0.453	0.000
First_SH	5096	0.452	4298	0.210	0.242	0.000
Fgn_SH	5096	0.002	4298	0.052	-0.050	0.000
Bank_SH	5096	0.005	4298	0.049	-0.045	0.000
Employee	5096	3527	4298	877	2650	0.000
Total_Asset	5096	3.01	4298	588.30	-585.0	0.000
Debt_Asset_R	5096	0.474	4298	0.423	0.052	0.000
Fixed_R	5096	0.457	4298	0.533	-0.076	0.000
Sales_R	5096	0.850	4298	0.798	0.053	0.062
EATR	5096	0.036	4298	0.015	0.022	0.135
RER	5096	0.046	4298	0.168	-0.122	0.000
Tobin_q	5096	0.681	4298	0.307	0.374	0.000
BLR	5096	0.751	4298	0.325	0.426	0.000
Invest_R	5096	0.111	4298	0.466	-0.355	0.000
Interest_R	5096	0.059	4298	0.039	0.020	0.000

Table 4: Mean Comparison Tests between Chinese and Korean Firms

*The p values are from the two tailed tests. This rule applies to all the tests for coefficients and group mean tests here.* Table 5: Number of Defaulted Firms in China and Korea

Year		China			Korea	
fear	Total	Default	Ratio	Total	Default	Ratio
2000	394	6	1.5%	491	9	1.8%
2001	483	7	1.4%	532	7	1.3%
2002	534	13	2.4%	520	12	2.3%
2003	585	10	1.7%	500	12	2.4%
2004	704	17	2.4%	496	17	3.4%
2005	791	15	1.9%	487	15	3.1%
2006	597	2	0.3%	478	1	0.2%
2007	571	3	0.5%	794	10	1.3%
Total	4,659	73	1.6%	4,298	83	1.9%

#### Default Models

In order to test the existence of SBC for defaulted firms, we have to consider both risks and risk premium of the loans to say whether the firm was softly budgeted or not. While it is not possible for banks to know in advance whether a firm will default or when it will default, we can presume that a bank will predict the probability of a borrower's default to determine whether to provide funds or to determine interest rates or any other terms in their loan contracts. Together with interest rate they charge, the related risks will be taken into consideration before they provide loans. Very low quality firms expected to default in a short horizon due to poor performances and/or risky capital structure are expected to be denied not only additional loans but also rolling existing loans over in a market without SBC problems. As in Alexeev and Kim (2008), we would conclude that a firm is softly budgeted if it gets additional loans from banks even at a higher default risk after considering higher risk premium. In order to determine whether banks provide funds to firms with high default risks, we have to estimate corporate default risks by finding out determinants of corporate defaults. Following Altman (1968), and Alexeev and Kim (2008), we select 335 defaulted Korean firms by the end of year 2007 and 335 firms surviving by the end of year 2007. In order to avoid

endogenous SBC problems in the dataset, we use randomly selected non-defaulted firm data from year 2000 to year 2007. The basic model for estimating default risks of firms is specified in the following multivariate probit/logit model:

$$Default_{i,t} = \beta' X_{i,t} + \varepsilon_{i,t}$$
(1)

where the dependent variable,  $Default_{i,t}$ , indicates whether a firm i defaulted in t, where all independent variables used in the model as listed in Table 6, are denoted by  $X_{i,t}$ , and where  $\varepsilon_{i,t}$  denotes error terms. We assume in this specification that the default risk of a firm can be estimated with information available in the prior year.

Variable	Mode	II	Mode	el II	Mode	Ш	Mod	lel IV
Valiable	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Age	-0.098***	(0.000)	-0.101***	(0.000)	-0.192***	(0.000)	-0.190***	(0.000)
Govt_SH	-3.258	(0.331)	-3.644	(0.302)	-7.528	(0.250)	-7.259	(0.262)
First_SH	-1.705***	(0.000)	-1.956***	(0.000)	-3.433***	(0.000)	-3.374***	(0.000)
Bank_SH	-1.160	(0.222)	-1.262	(0.184)	-1.743	(0.303)		
Ln_Asset	0.031	(0.577)	0.047	(0.401)	0.045	(0.663)		
Debt_Asset_R	2.318***	(0.000)	2.082***	(0.000)	4.102***	(0.000)	4.144***	(0.000)
Sales_R	-0.408***	(0.000)	-0.575***	(0.000)	-1.178***	(0.000)	-1.199***	(0.000)
EATR			-0.285*	(0.095)	-0.638**	(0.028)	-0.630**	(0.033)
EBIDTAR	-2.215**	(0.033)						
Tobin_q	-1.434***	(0.000)	-1.593***	(0.000)	-2.910***	(0.000)	-2.856***	(0.000)
RER	-1.693***	(0.004)	-1.744***	(0.003)	-2.885**	(0.012)	-2.768**	(0.014)
Constant	2.219	(0.128)	2.220	(0.115)	5.154*	(0.052)	6.132***	(0.000)
Observations	670	)	67	0	67	C	67	70
Pseudo R-sq:	0.63	06	0.63	77	0.64	51	0.64	439
P(right Default)	92.20	)%	94.9	0%	92.50	)%	91.9	90%

Table 6: Default Prediction Models and Their Predictability

Note: 1. Dependent variable is DEFAULT, dummy variable; 1 if the firm is defaulted, 0 otherwise.

2. Coefficients are statistically significant at 10%, 5% and 1% level for \*, \*\* and \*\*\* respectively.

3. P-values are for two-tailed tests.

We report default prediction models in Table 6. Model I and II are probit models while Model III and IV are logit models. We can see that F values are very large for p-values equal to 0.0000 and R<sup>2</sup> values are not poor for all models. We can also recognize that coefficients and p-values are pretty much stable across models, implying that the models and coefficients are robust for probit and logit models and for models with some other variables. They predict defaults for actually defaulted firms with accuracy of 0.9 or above. We select Model II for the baseline model to use in the following sections, based on predictability of models for actually defaulted firms. Unlike Alexeev and Kim (2008), we do not use a variable for chaebol firms and other variables that might affect the default risks, because we apply the model for Chinese firms whose dataset does not contain such variables. In this sense, the predictability of the models in this study is lower and models might suffer some misspecification problems. The estimated results are more or less same as expected.

#### Comparisons of Soft Budget Constraint

In this section, we formally test whether the Chinese firms get more loans compared with Korean firms, after controlling for interest premium (Interest R), government ownership (Govt SH) effects, etc. For

2013

$$BLR_{i,t} = \alpha + \beta' X_{i,t} + China \cdot \beta' X_{i,t} + u_i + \varepsilon_{i,t}$$
(2)

where the dependent variable, BLR<sub>i,t</sub>, indicates the ratio of bank loans to total assets of firm i for the year t as defined in Table 1; all independent variables used in the model as listed in Table 1, are denoted by a vector  $X_{i,t}$ , and another vector of interactive terms China· $X_{i,t}$ ;  $\varepsilon_{i,t}$  denotes error terms; and  $u_i$  denotes group specific error terms. The interactive terms with China (dummy variables) are introduced to investigate all additional effects of Chinese firms in each of the variables in the models. The model assumes that individual firm specific constant terms as randomly distributed across firms while the fixed effects model assumes that there are differences in constant for banks and parametric shifts of the regression function. The results of random effects models for the panel data are provided in Table 7. Since R<sup>2</sup> values of the random effects models are 0.6295, 0.6164 and 0.3728 and p-values for F statistics are 0.000 for all random effects models, we may accept the models as appropriate ones.

Variable	All		Kor	ea	Chir	าล	
variable	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	
BLR(t-1)	0.722***	(0.000)	0.655***	(0.000)	0.293***	(0.000)	
High_Risk	-0.001	(0.966)	0.002	(0.849)	0.030***	(0.001)	
Interest_R	0.863***	(0.000)	0.951***	(0.000)	-0.128*	(0.083)	
Tobin_q	-0.048***	(0.003)	-0.065***	(0.000)	-0.031**	(0.054)	
Fixed_R	-0.003	(0.900)	0.010	(0.544)	0.766***	(0.000)	
OCFR	-0.064***	(0.000)	-0.064***	(0.000)	0.202***	(0.000)	
China	0.109***	(0.000)					
China∙BLR(t-1)	-0.433***	(0.000)					
China•High_Risk	0.029**	(0.028)					
China•Int_R	-1.002***	(0.000)					
China•Tobin_q	0.011	(0.614)					
China•Fixed_R	0.775***	(0.000)					
China∙OCFR	0.267***	(0.000)					
Year_Dummy	(Not Rep	orted)	(Not Re	ported)	(Not Rep	ported)	
Constant	0.080***	(0.000)	0.089***	(0.000)	0.175***	(0.000)	
Observations	812	4	347	73	465	51	
p>F	0.00	0	0.00	00	0.000		
Adjusted R-sq:	0.61	95	0.61	.64	0.3728		

Table 7: Bank Loans and High	Risk Firms in China and Korea
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Note: 1. Dependent variable is DEFAULT, dummy variable; 1 if the firm is defaulted, 0 otherwise.

2. Coefficients are statistically significant at 10%, 5% and 1% level for \*, \*\* and \*\*\* respectively.

3. P-values are for two-tailed tests.

From Table 7, we can see that there are many differences in factors affecting loans from banks. For Korean firms after the Financial crisis in late 1990s, the budget constraints hardened as we can see in the model for high risk firms (High\_Risk), without any statistical significance, while high risk Chinese firms with expected default risk of 0.9 or above experience SBC problems.

The result implies that the higher the default risks of firms, the more debts they can finance from banks. From models for Korean firms, we can see that firms with more loans from banks in the previous year (BLR(t-1)) and those paying higher interest payments (Interest\_R) obtain more loans from banks, while firms with more cash flows from operation (OCFR) and higher market values relative to book values (Tobin\_q) obtain less bank loans with statistical significance. However, Chinese firms with higher risks (High\_Risk) and more fixed assets like land, building, equipments and investment in other firms (Fixed\_R) and more cash flows from operation (OCFR) as well as more loans in the previous year (BLR(t-1)) lead to more bank loans, while firms with higher market values relative to book values

(Tobin\_q) and those paying more interest expenses (Interest\_R) obtain less bank loans, the last one with statistical significance of p-value 0.083 for two tailed tests. From the pooled dataset for two countries, we could verify the effects of factors for Korean firms as in the case of separate dataset for Korean firms. For Chinese firms, we can see the marginal effect of factors on their bank loans from the interactive terms with country dummy (China): positive marginal effects of the country (China), high risk firms (China·High\_Risk), fixed ratio (China·Fixed\_R) and cash flow from operation (China·OCFR); negative marginal effects of interest rate (China·Interest\_R) and current loans (BLR(t-1)). The results suggest that high risk Korean firms do not experience SBC that existed before its financial crisis in late 1990s any more in our sample period of 2000-2007, while such Chinese firms experience SBC. Therefore, we can also conclude that Chinese banks mostly owned by the Chinese government or controlled through governmental firms are softly budgeting high risk firms in China.

# CONCLUSION

In this study we have studied the existence of SBC, or supporting poorly performing high risk firms in an economy in transition though bank loans, using a combined panel data of Chinese and Korean firms listed on the stock markets from 2000 to 2007. We have focused on SBC in China in comparison with Korea, which is alleged to experience a severe SBC before its financial crisis occurred in 1997 and harden the budget constraint. This study, following the inaugural study of Kim (2003) and Alexeev and Kim (2008) on SBC in a market economy at a national level for firms publicly owned and traded, showed that there exists a SBC in the Chinese banking sector for publicly owned firms for the first time and that the budget constraint in an economy in transition is much softer than that in the market economy with the examples of the two countries. China and Korea. The results support the theoretical studies by Kim (2003). Alexeev and Kim (2004) and Kim (2009) about the effects of reputation of lenders, competition, and their strategic decision making on SBC in a centralized and decentralized economy in toughening budget constraints. We also have found that factors affecting bank financing in China and Korea are guite different. Most strikingly, Chinese firms with better cash flows from operation obtain more bank loans, while such Korean firms resort less to bank financing. In addition, while Korean firms paying higher interest rates finance more loans from banks, while such Chinese banks finance less from banks. This might imply that for firms in Korea and China might have different sources of financing in the times of high interest rates or in the case of high risk premium asked. We may extend our study on SBC for firms not listed on the stock exchanges or for governmental firms in a market economy and transitional economy. We can also focus on the causes of SBC in such countries like high unemployment, political reasons, etc.

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# ABSTRACT

The cost and benefit of various services and goods in public sector cannot be measured directly in terms of dollars. The willingness to pay principle (WTP) and the willingness to accept principle (WTA) are methods commonly used to assess the cost and benefit of these services or goods. This paper addresses the usage of these principles in the realm of public education, to be more specific, how the principles applied to measure the extent to which people are willing to support their local school. There are two types of issues involved here: diffuse support and specific support. The former regards how much people are willing to contribute to local schools. The latter regards how much people are willing to contribute to the local schools their children attend. The major objective of this paper is to present a conceptual framework for the systemic analysis of residents' support for their public schools.

**KEYWORDS:** willingness to pay principle (WTP), willingness to accept principle (WTA), program evaluation, cost-benefit analysis, public education (school)

# **INTRODUCTION**

The systemic evaluation of public programs becomes more and more critical in the area of public policy. This is so because people are more effectively awareness since almost all governments around the world today are facing serious deficit crises. People seek to understand the costs and benefits of various public programs and demand their government make the best use of taxes collected from them. Nonetheless, the inherent characteristics of public sector render the ineffectiveness of evaluation techniques that are quite common in terms of private enterprise. The evaluation of public programs is not as easy as those found in the private sector in that there is no competition for the services provided by public programs and that people usually need not pay for receiving the services. That is, people pay inadequate attention to the costs of public programs as well as the effectiveness thereof. The evaluation of public programs' costs and benefits, thus, is vital nowadays. However, related analytical tools in this regards are limited since public services are not easily to be evaluated in terms of dollars. The concept of willingness to pay (WTP) and the concept of willingness to accept (WTA) are commonly used to evaluate the economic values of public programs or services. Their application in real situations is, nonetheless, subject to many technical and practical issues.

All individuals are rational and seek to maximize utilities regarding their economic and consuming choices. Children's schooling is a product that parents need and purchase in a market in which local governments, by means of collecting taxes from residents, provide and support. Public schooling is one of the policy area in which residents in general, parents in particular, care significantly in that their children's education depends on it as well as they are responsive for the costs. Local residents' decisions of supporting their school districts can and should be analyzed in terms of costs and benefits (Treasure Board of Canada Secretariat, 2007). It is the intention of this presentation to addresses the usefulness of the WTA and the WTP in evaluating residents' support for public school' i.e., how far they are willing to go for local public schools.

#### LITERATURE REVIEW

The application of the WTP and the WTA requires empirical data and there are several ways to gather such dada (Breidert et al., 2006). In addition, there is good and important difference between the WTP and the WTA, each revealing different reasoning and relying on different set of variables (Ahlheim, 2000). The usage of the WTP and the WTA in public policy requires a few technical arrangements (APAC, VHS, 2001). Several Canadian governmental guides provide, in this sense, good insights (Treasure Board of Canada Secretariat, 2002, 2007).

#### METHODOLOGY

Rational choice perhaps is, in the arena of public administration, the theory that closes to the "grand" theory. Under the assumption of rational choice, everyone acts according to his or her rational motivation, i.e., self-interested or seeking maximized utility. It is in this capacity that the WTP and the WTA are applicable to public policy. However, the usage of the two principles in the area of public policy takes more efforts in that usually public programs are not easily measured in terms of dollars and that, even when the measuring is possible, there is an emphasis of public goodness or civic duty, which requires special treatment. The method to this end is to distinguish support into two types: one emphasizes the self-interest side and the other the public or civic-duty side. It is expected that the WTA and the WTP work differently in different context.

In order to make the task simply, it is not avoidable to make a few assumptions. First, there are different types of support and each type stresses different functions. The most useful typology is the distinction between diffuse support and specific support. Second, everything being equal, specific support is a stronger motivation than diffuse support. The logic behind this assumption is obvious that people feel stronger when personal interest is at stake. Thirdly, there will be no specific support means, by definition, that people support something when they get rewards from their action of support. In case of education, the fact that one has children attending local schools constitutes the foundation for their support.

#### ANALYSIS AND DISCUSSION

There are, basically, two types of support: diffuse support and specific support. The former refers to the kind of support disregard of one's actual rewards from the program or policy at stake; the latter to the kind of support based on whether or not one benefit from the program or policy at stake. In the arena of public education, diffuse support means that residents support their public schools even though they do not have children or their children do not attend local schools. Specific support means that residents support their public schools when their children currently enroll local public schools. This presentation is intended to provide a conceptual framework by employing the WTA and the WTP to measure residents' diffuse and specific support for their local schools.

The WTA and the WTP are, in the area public policy, two concepts widely used to define and measure economic value of something or some services, which cannot be measured directly in terms of dollars. The WTP refers to the maximum number of dollars that a person is willing to give up all other goods and services in order to get something. The WTA refers to the minimum number of dollars that a person is willing to scarify all other goods and services in order to avoid something undesirable. Different from the WTA, the WTP is constrained by one's wealth, i.e., if one desires something strong enough, the maximum amount of money he can pay is his whole wealth. On the other hand, the willingness to accept payment in order to swallow the loss of one's most precious item would be an extremely high amount of money, perhaps approaching infinity. These two concepts are especially useful in measuring the economic values of those "things" which cannot be measured directly in terms of dollars such as services (education, public safety, law and order, etc.), concepts (well-being, economic development, democracy, etc.), state

of mind (spiritual suffering, happiness, extent of torment, etc.) Nonetheless, the WTA and the WTP are just concepts; their application in real situation is subject to further discussion.

One simplest way to estimate one's amount of WTP or WTA is survey, asking people how much they are willing to pay or willing to accept in a hypothetical situation. Although this is the common practices, the task of estimation will be simplified greatly if models, specifically designed for specific policy areas, can be formulated. To be more detailed, any specific public policy displays unique characters and contains aboriginal theories showing certain cause-effect relations which, in turn, indicate possible independent variables as well as common interfering variables. With this information, researchers are able to pinpoint whom serve as the better subjects of survey and to screen the samples so as to minimize the appearance of interfering variables. It is, then, the task of this paper to identify the key variables regarding residents' support of public schools and to formulate a proper model thereof.

How can we model residents' support of public school? One good start is to investigate into the meanings and details of support. The basic taxonomy in this regard is, as stated earlier, the so-called diffuse support and specific support. Diffuse support does not, by definition, directly link to personal utility, whereas specific support directly refers to personal utility. Based on the rational assumption, residents may or may not, depending on their utility function, support their local public schools. Although different factors involved in diffuse supports, i.e., personal income. It is highly likely that people tend to support local public schools more if they are wealthier and, all other things being equal, are less willing to support local public schools when they are not so well to do.

As to diffuse support, personal direct consideration is minimized in that one's decision of supporting local schools does not rely on one's personal interest in this regard. Factors involved in diffuse support include personal conviction, safety in neighborhood, the goodness of the nation, etc. Personal conviction means that one convinces that education is important and is the right thing to support public education. The reason for this kind of convictions is, however, irrelevant, may it be previous experience, occupation, ideology, or no precise cause at all. What matters is the existence of the conviction that public education is important and one should support it financially. The factor "safety in neighborhood. Although the factor originates from one's ego-interest, it mainly links to the community as a whole and thus falls into the category of diffuse support. Some people may deem that contributing to local schools is something for the goodness of the nation and is part of civic responsibility. Affected by these factors. people develop their diffuse support for local schools even in the absence of their direct personal interest at stake.

As to specific support, personal interest is, by definition, at stake. One develops this kind of support when it serves one's ego-interest. Factors such as whether or not one has children, the extent to which parents care about their children's education, the availability and costs of alternative private schools, etc. First, the fact that whether or not residents have children is crucial in developing their attitude toward local education system. It is very hard, if not impossible, for residents without any child of their own to forge certain extent of specific support. Second, having their own children alone is not sufficient for parents to develop a positive attitude toward local schools if they do not care much about their children's education and this cannot be realized without a strong conviction on the part of parents that education is important for their children. Thirdly, the availability and costs of alternative private schools directly affects parents' decision of letting their children attend local public schools. Parents are unlikely to, even in the presence of the above two factors, develop a sense of specific support if there is a good private school with a reasonable price. These three factors affect residents' specific support for local public schools.

The WTP operates in terms of maximizing personal costs vis-á-vis benefits resulting from a certain decision of acquiring something desirable. In the case of public education system, residents decide to support the public schools only when the utilities of the good public schools exceed the maximum costs they are inclined to pay. The WTA operates in terms of minimizing personal costs vis-á-vis benefits resulting from a certain decision of avoiding something undesirable. In the case of public education system, residents decide not to support the public schools only when the minimum benefits they are inclined to give up exceed the utilities of avoiding bad public schools. The above implications is not accurate at all in that it does not make distinction between diffuse support and specific support. The reason for such a distinction is that the two types of support function differently and are affected by different sets of variables, as stated before. In the following section, the two types of support are analyzed separately in the context of the WTP and the WTA.

As far as diffuse support is concerned, the variables involved are personal conviction, safety in neighborhood, and the goodness of the nation. People usually are not highly motivated by these factors and are not willing to pay much, even in the presence of these factors, to support local public schools. That is to say, the WTP is not effective to estimate the extent of diffuse support. To bring the factor of personal income into consideration, the scenario does not change in a fundamental way. People are unlikely to develop a sense of diffuse support for local education simply because they are rich. Moreover, the extent of diffuse support will not change, in the absence of personal conviction, safety in neighborhood, and the goodness of the nation, followed by the change of personal income. The fact that someone is rich or not may play only a marginal role in shaping his or her inclination of diffuse support. On the other hand, people are likely to figure out whether or not they feel obliged to support local schools generally in a negative manner, i.e., people will ask themselves this question; "If things turn out to be really bad, how much is it going to cost me?" It is in this manner that individuals are inclined, in the presence of personal conviction, community safety, and the goodness of the public, to assess their extent of diffuse support for local public schools. To the extreme situation, such as imminent local riot resulting from bad schools, the willingness to accept payment in order to swallow the loss of one's life and home can perhaps approach infinity. The WTA is, thus, a better approach to understand residents' diffuse support for local schools.

As far as specific support is concerned, the variables involved are whether or not one has children, the extent to which parents care about their children's education, and the availability and costs of alternative private schools. People response to, when personal interest is at stake, the question of giving out something more directly and clearly. A sharp comparison between the maximum number of dollars that a person is willing to pay and the utility of getting something or some service is likely to take place when the person has a personal and positive tie to that something or some service since he or she feels strongly about wanting that something or some service. Under such a sharp comparison, the person can judge whether or not the utility exceeds what he or she is willing to pay and, based on the judgment, the person is able to make the decision. The WTP operate better in this sense. In addition, the factor of personal income plays a critical role here. It is impossible for parents, no matter how much they value their children's education, to pay more than their wealth for the support of local public schools, i.e., parents' choice is constrained by their wealth. Such an observation is consistent with the WTP. On the contrary, people usually are unlikely to make a sound decision, in the context of specific support, in a negative manner, i.e., "what I need to give up in order to avoid losing that something or some service," is not very useful in helping people make a sound decision. It is, thus, the WTP functions better in estimating specific support. The WTP is, thus, a better approach to understand residents' specific support for local schools.

# CONCLUSION

The term "support" is an operative one; a further investigation is needed before we can address the issue of residents' support for local schools. Our investigation shows that different set of variables operates in the context of diffuse support and specific support. The variables operate in specific support are such as whether or not one has children, the extent to which parents care about their children's education, and the availability and costs of alternative private schools. The variables operate in diffuse support are such as the personal conviction, safety in neighborhood, and the goodness of the nation. In addition to these variables, there is one common variable operates in both cases, i.e., personal income. Although the factor of personal income operates in both diffuse support marginally and specific support substantially. As to the other variables, different set of variables function differently in case of diffuse support and specific support and sp

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# ASSESSING FACTORS DRIVING INTERNET USAGE AMONG SMEs IN GHANA; A CASE STUDY OF SMEs IN KUMASI

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# ABSTRACT

The Internet has revolutionized, and continues to significantly affect, the way business is carried out globally. As businesses of all sizes align ICT to its processes to achieve operational excellence while reducing cost using the internet has become even more critical than ever. This empirical study was conducted to assess factors that drive the usage of Internet as part of the business operations of SMEs. A quantitative approach was mainly used to analyze variables. Data for the study was collected through interviews and observational visits which were analyzed to examine internet usage in association with other explanatory variables including the use of mobile phones and televisions. Service-related businesses were more likely to use Internet for business operations than manufacturing or retailing SMEs. However, the number of years of experience in internet usage had a strong association with SMEs that did. Results also indicated that SMEs studied were gradually progressing towards the use of sophisticated technologies in business, and although respondents asserted to the benefits derived from the use of the Internet in business, replacing conventional media with internet services was unlikely. Issues about cost, slow access speed and customer communication preferences were major Internet usage challenges that needed to be addressed. Also awareness should be created on the potential economic benefits the internet could yield to SMEs.

#### **INTRODUCTION**

The Internet represents one of the most successful examples of sustained investment and commitment to research and development in information infrastructure. A survey conducted in Ghana by Frempong and Essegbey (2006) on the use of ICT indicated that despite the wide availability of internet service and relatively high literacy rate among the owners of SMEs only a few of them (7%) used the internet for business activities in the Ghanaian economy. The issue that immediately rises is that if it is neither a question of literacy nor the availability of the service, then what other factors drive internet usage patterns in Ghana?

One determinant, well noted in literature is the proliferation of devious individuals who wish to exploit the Internet for their own selfish interests. This type of conduct has made sincere users vulnerable to a host of possible attacks that compromise the confidentiality, integrity, and availability of information that they exchange through the Internet. As a result of such illicit activities, people tend to lose trust on the security of doing business in the Internet and thus, forego its huge potential for business and other socially desirable uses. The cost of adoption has also been regarded as an important factor in the adoption and use of the Internet (Young, 2001). Generally, the higher the costs associated with adopting the innovation, the slower the pace of usage expansion is likely to be.

Another factor according to Mohammad (2009) is that small businesses in Malaysia tend to avoid internet usage in their business because it is perceived as complex to use. This problem was also attributed to the lack of skills amongst employees in using the internet for business. Mohammed also indicated that the benefits perceived by the small businesses from internet usage were vestigial and hence the low adoption of this technology. But do these factors apply within the Ghanaian context?

Although extensive research literature exists on the usage of the internet in supporting competitiveness of SMEs, there is still the need for a deeper understanding of the factors that either promote or inhibit the adoption and usage of this facility by SMEs within specific contexts. The need for this study is therefore for two main reasons. First, most of the empirical research studies available about determinants of Internet usage for business activities were conducted in other countries and on larger formal companies. Secondly, identifying the major driving factors of internet usage among SMEs will provide appropriate information to these businesses to make informed choices and consequently promote internet usage as part of their business operations.

#### LITERATURE REVIEW

According to (Ion & Andreea, 2008), the Internet has become a driving force for development and innovation in many countries with millions of businesses connected to it worldwide. This assertion is supported by a study conducted in 2008 which indicated that 68% of large companies in Albania made use of online ordering facilities (Sevrani & Bahiti, 2008). Earlier statistics by Dixon, et al., (2002) also depicted that 63% of all UK SMEs were connected to the Internet in 2001 with 540,000 SMEs trading online. In this study, Dixon further indicated that over half of SMEs (57%) attributed broadband to improved profits and two thirds to lowering the cost base. A more recent study on Canadian manufacturing establishments drawn from Statistics Canada's Business Register, for instance, showed a greater usage of advance ICT among those that recorded higher productivity (OECD, 2004). This suggests that the Internet is indeed changing the way business is done in these economies. Thus, it is making commercial activities more effective, making more information available for decision making, and producing more results, faster. The Internet is also known to offer new ways of displaying results, such as real-time financial systems that can be accessed from just about anywhere (Alam & Noor, 2009). Such access to both computer power and business information have provided the platform for customers and suppliers to find answers to questions they could only imagine a few years ago.

Literature point out some of the benefits the internet accrues to the business world ((Dixon, Thompson, & McAllister, 2002); (OECD, 2004); (Sevrani & Bahiti, 2008); (Ilavarasan & Levy, 2010)). These benefits are categorized into operational tactical and strategic benefits as Illustrated by Ion & Andreea, (2008).

#### **DATA AND METHODOLOGY**

A comparative case study was employed to examine the research problem within the context of the locations chosen. For this reason there is little assurance on how representative the results of this study would be to all SMEs in Kumasi. Selected areas from the Kumasi metropolis were targeted for the study. Information about the number of SMEs available at these target areas were received from the sub-metros and the Kumasi Metropolitan Assembly (KMA) itself. The total population figures received corresponded with the SMEs which had registered with these institutional bodies.

Primary data for the study was collected through interviews and observational visits. Interactions with each of the respondents under study consisted of a mix of closed-ended and open-ended survey questions. A questionnaire was designed for this purpose with numerical codes assigned to alternative responses where appropriate. This study was not designed to directly examine internet usage effects on revenue, productivity or cost. Instead, the study was limited to the assessment of the characteristics and internet usage behaviors, and linked them to the decision to use internet as part of business operations. For this reason, questions for the interview examined attitudes, opinions and organizational practices rather than financial indices. The close ended questions were dominantly used to receive responses concerning the characteristics of the businesses as well as the attitudes, behaviors and opinions of the respondents towards the use of the Internet. Data on respondent reactions and suggestions were collected using semi-structured, open ended questions.

The questionnaires were either self-administered or interviewer-administered depending on the preference of the respondent. Self-administered questionnaires were physically delivered to and collected from the intended respondent to reduce possibilities of contamination and unknown biases. Also, the reliability of the questions was assessed mainly through the alternative form approach. Other approaches such as the test re-test were used but sparingly to avoid possibilities of irritating a respondent by repeating questions. The targeted groups for the interviews were the managers and owners of the businesses since literature suggests that the decisions of these groups in such establishments invariably have major impacts on the operational behaviors of other employees (Abor & Quartey, 2010).

# **EMPIRICAL RESULTS**

Socio-Demographic Characteristics of Respondents: The socio-demographic characteristics of respondents from selected key areas of SME operations were gathered. The sex distribution of respondents was analyzed and it showed that majority (57.5%) of SME operators were males. The age distribution of respondents was found to be mainly between ages twenty-six to forty-five (26 - 45), with most of the respondents within the (36 - 40) age group. Responses from the study also indicated that a larger percentage of respondents of the study area (71%) had at least secondary level formal education. The difference between those who had attained up to the secondary level and those who had tertiary level education was marginal for the study area. Apart from the non-responses (11.1%), all respondents indicated that they had attained at least secondary level formal education whilst about five percent (4.6%) had no educational background. More than two-thirds (71.6%) of respondents that managed the SMEs in Kumasi were owners. However, SMEs in education related fields like finance, ICT, training, and engineering had a fairly balanced distribution between owner managers and others who were employed as managers were observed. It was also realized during the survey that most of the respondents categorized as managers had family relations with the actual owners.

Exposure to ICT UseResponses on the level of exposure of the respondents to ICT in general were analyzed on three (3) variables; mobile phones, computers and the Internet. This analysis was not limited to the usage of these media for business. A large number of respondents in Kumasi (92.5%) owned and used mobile phones. With respect to the use of computers, a significant number of respondents at the central business district (45.4%) could not use a computer. Negative responses on computer usage at Ayeduase (near KNUST) were however lower (22.2%). According to the survey 55% of respondents knew how to use the Internet.

*Knowledge About The Internet:* Responses were received on the knowledge of respondents about the internet. Responses were analyzed from two perspectives; the respondent's awareness of the internet and the respondent's perception about the Internet. Responses received indicated that a large number of respondents had heard about the internet 94%. However, five (5) of the respondents indicated that it was the first time they were hearing about the internet. The Internet as a medium for communicating was the dominant perception in Kumasi. This was followed by the perception of the internet as a tool for research and learning. Eight (8) respondents described the internet as a facility for online business transactions such as payments and purchasing whilst an equal number of respondents (8) also described the internet as a place for advertising and finding new products. One peculiar response was the description of the internet as a facility for the youth. Others (8) also viewed it as a place for social rather than business intentions.

Adoption of the Internet in Business: Data was analyzed from the entire sample size and subsequently scaled down to reflect responses from one hundred and forty (140) respondents from Adum and seventeen (17) from Ayeduase (those who used the internet but not necessarily for business activities) to examine the extent to which the respondents had integrated internet usage with their business activities. Included in

the findings were responses on the hindrance to internet adoption for businesses. Out of the total respondents from Adum, 27.1% used Internet services in their businesses whereas Ayeduase results indicated that 55.6% of respondents used the internet for business operations. Focusing on those who had experience in the use of the internet, 59.3% of 140 respondents from Adum used the internet in their business activities whilst 40.7% did not. On the other hand 88.2% of respondents at Ayeduase used the internet for business purposes. Only one respondent had not adopted the internet for use in business operations.

Based on the results of the study, 89% of respondents at Adum indicated that slow access speed was a hindrance to the use of internet for business. The issue of cost was also pointed out by 77.2% of respondents at Adum. The distance between the respondent and the location of the service was a challenge to a few 15.8%.

*Factors Driving the Usage Of Internet In Business:* Responses on how the internet is used in business were paired against the characteristics of the respondents to determine the relationship between these factors and the usage of the internet for business purposes. The characteristics considered for this study was based on findings from literature about the common factors that influence internet adoption (Taylor, Zhu, Dekkers, & Marshall, 2003). These factors were the age, education, business type, and experience in the usage of the internet. With respect to experience, three variables were considered; the length of usage of the internet; the frequency of usage of the internet; and the time spent per week in using the internet. The strength of the associations was also subjected to the Pearson's Chi-square test to find their p-values. A univariate logistic regression model was also used on responses from ADUM to predict the probability of the occurrence of the relationships.

		BUSINESS USE											
Age Groupings		A	DUM (	N=306)			AY (N=27)						
		Yes		No		N/A		Yes		No		N/A	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	
18 – 25 yrs	6	85.7	1	14.3	0	0.0	3	100.0	0	0.0	0	0.0	
26 – 35 yrs	33	48.5	13	19.1	22	32.4	7	50.0	1	7.1	6	42.9	
36 – 40 yrs	25	22.7	33	30.0	52	47.3	3	75.0	0	0.0	1	25.0	
41 – 45 yrs	16	23.5	12	17.7	40	58.8	1	50.0	0	0.0	1	0.0	
46 – 55 yrs	3	7.0	3	7.0	37	86.0	1	100.0	0	0.0	0	0.0	
56 – 60 yrs	0	0.0	0	0.0	5	100.0	0	-	0	-	0	-	
Above 60 yrs	0	0.0	0	0.0	3	100.0	0	0.0	0	-	0	-	
Missing	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	3	100.0	
Pearson's Chi square			p-val	ue <0.001					p-val	ue=0.542			

Table 14: Age Groupings And E – Business Adoption

However the possible influence of several variables on this predictive model should be noted. A logit model was also developed for age groupings on the use of Internet in businesses. The p-values reported for respondents from Adum were less than 0.001 whilst a p-value of 0.542 resulted for observations at

Ayeduase. From the logistic regression table (Table 15), the Odds Ratio on the true population for those aged 46 - 55 years, at a confidence interval of 95% was between 0.001 and 0.14 with a p-value less than 0.001.

	A	DUM	
	<b>Odds Ratio</b>	(95% Conf. Interval )	P - value
Age Groupings			
18 – 25 yrs	1		
26 – 35 yrs	0.15	(0.02 – 1.38)	0.095
36 – 40 yrs	0.05	(0.01 – 0.43)	0.006
41 – 45 yrs	0.05	(0.01 - 0.46)	0.008
46 – 55 yrs	0.01	(0.001 - 0.14)	< 0.001

Table 1: Adum Univariate Logistic Regression For Table 14

Results from responses received on the association between educational level of respondents and their use of internet in business are presented in Table 16. Due to the very few observations for education against internet use in business, a logit model was not developed. However, the p-value derived from the cross-tabulation was less than 0.001 for respondents from Adum and 0.056 for responses from Ayeduase.

Table 2: Educational Level E – Business Adoption

			ADUM	(N=306)					AY	(N=27)		
-	J	les	]	No N/A		Yes		No		N/A		
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
Education Level												
None	0	0.0	2	14.3	12	85.7	0	-	0	-	0	-
Primary	0	0.0	0	0.0	74	100.0	0	-	0	-	0	-
Secondary	17	15.9	28	26.2	62	57.9	4	40.0	1	10.0	5	50.0
Tertiary	66	64.1	31	30.1	6	5.8	11	78.6	0	0.0	3	21.4
Missing	0	0.0	1	12.5	7	87.5	0	0.0	0	0.0	3	100.0

As shown on Table 17, the p-value of the relationships established between the type of business and the use of internet for business purposes was 0.001 for responses received from Adum and 0.027 for that from Ayeduase. Following the Odds Ratio, for each manufacturing SMEs that used internet for businesses, there was likely to be 1.15 more retail SMEs that were also using Internet in business and 3.27 more service-related SMEs. If the true population of SMEs at Adum was considered, at a confidence interval of 95%, the Odds Ratio for retail SMEs would lie between 0.41 and 3.24 with a p-value of 0.787 whiles the Odds Ratio for service-related SMEs would lie between 1.02 and 10.45 with a p-value of 0.045.

					В	USINES	S USI	E				
		A	DUM	(N=306	)	AY (N=27)						
	Yes		No		Ν	N/A		Yes		No		N/A
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
Business type Manufacturing	5	21.7	0	0.0	18	78.3	0	-	0	-	0	-
Retailing	58	24.3	58	24.3	123	51.5	2	28.6	0	0.0	5	71.4
Service	20	47.6	4	9.5	18	42.9	13	76.5	1	5.9	3	17.6
Missing	0	0.0	0	0.0	2	100.0	0	0.0	0	0.0	3	100.0
Pearson's Chi square	p-value =0.001 p-value										.7	

#### Table 3: Business Types And E – Business Adoption

Table 4: Adum Univariate Logistic Regression For Table 17

		ADUM		
Business Type		Odds Ratio	(95% Conf. Interval )	P - value
	Manufacturing	1		
	Retailing	1.15	(0.41 – 3.24)	0.787
	Service	3.27	(1.02 – 10.45)	0.045

As shown on table 19, the p-value from a cross-tabulation between frequency of use and internet usage in business was less than 0.001 for both study areas. Also the Odds Ratio for Adum observations was 0.06 for those who used the internet 2 - 3 times a week.

The p-value for the association between the amount of time and the use of internet for business purposes was 0.001 for responses received from both Adum and Ayeduase. If the true population of SMEs at Adum was considered, at a confidence interval of 95%, the Odds Ratio for respondents who spent over 20 hours of their time on the internet would be between 2.99 and 44.75 with a p-value less than 0.001.

# CONCLUSION

Results on the respondents' perceptions of what the internet was all about were relevant in confirming their awareness of the internet. In all, the internet was predominantly considered as a communication media. A significant number of respondents also regarded it as a tool for research and learning. From the analysis, years of experience in Internet usage had a considerable influence on decisions to make the Internet part of business operations. Thus SMEs operators that had more years of experience in the use of the Internet were more likely to use it in their business activities.

Results from the study, indicated strong associations between the frequency of internet use and the use of internet in business as well as time spent and its use for business. The causation however was possibly in reverse. Thus, SMEs that used the internet frequently or spent more time on the Internet may be due to the fact that they were using it for business purposes.

Majority of respondents who use it in business employ it as a means of communication. This usage corresponded with the dominant description of what the internet was perceived to be. It was therefore expected that the internet services for communication and search would be predominantly patronized. As anticipated, the email and search engines were highly patronized. It was also interesting to realize the number of respondents that owned personal websites, the functional level of the website was however not examined. Nevertheless, this suggested a progressive adoption of more sophisticated tools by these SMEs. An illustration of a possible adoption pattern based on the model by Sevrani, et al (2008) is illustrated in Figure 13.

From the analysis, majority SMEs studied that had integrated internet into their business activities had become highly dependent on it. The high number of respondents that realized new products and improved their product quality through Internet usage substantiated the usefulness of the Internet for new product search. The least benefit was the ability of SMEs to increase their customer base and to decrease the use of conventional media; this may be attributed to the low level of trust by many of Internet information related to business. Cost and access speed were the main setbacks in e-business. Despite the challenges, a good proportion of business users were fully satisfied with the e-business.

	BUSINESS USE											
Frequency of Use	ADUM (N=306) Yes No		N	N/A Y		AY (N=27) Yes No		N/A				
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
Daily	69	85.2	12	14.8	0	0.0	12	92.3	0	0.0	1	7.7
2 – 3 Times a week	14	24.6	43	75.4	0	0.0	1	50.0	1	50.0	0	0.0
2 – 3 Times a month	0	0.0	7	100.0	0	0.0	1	100.0	0	0.0	0	0.0
Once in a month	0	-	0	-	0	-	1	100.0	0	0.0	0	0.0
Missing	0	0.0	0	0.0	161	100.0	0	0.0	0	0.0	10	100.0
Pearson's Chi square			p-valu	e <0.001					p-valu	e<0.001		

Table 19: Frequency of Internet Use And E – Business Adoption

To conclude, the main objective for this study was to assess the factors driving Internet usage for business among SMEs in Ghana. This study was based on the perception of SME operators. The demographic and business characteristics of the SMEs studied were determined and information was tapped from responses to achieve specific objectives set out for the study. From the results, a large number of respondents at both study areas are familiar with mobile phones. This number however decreases with responses to the use of computers and the internet. Secondly, results suggest that access to internet facilities is not a critical challenge. Strong associations are identified between factors such as age, education and usage experience, and the pattern of Internet usage in business operations. Also, it is realized from the results that the SMEs are gradually progressing towards the use of sophisticated technologies in business. Finally, although respondents asserted to the benefits derived from the use of the Internet in business, replacing conventional media with internet services is unlikely.

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# **COLLABORATIVE EDUCATION: NEW FRONTIER FOR FUTURE EDUCATION AND YUNUS SOCIAL BUSINESS**

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# ABSTRACT

The concepts of 'sharing' Economy and Collaborative Consumption are gaining popularity in the business world due to internet based products and services. The widespread use and virtue of one of the extensions of collaborative consumption is collaborative education is discussed with some useful application. The main purpose is to show the existing and future potentialities of collaborative education, and how it would pave a pathway to effectively promote Yunus Social Business (YSB). Studies have shown the effectiveness and usefulness of present models of collaborative education and in order to further promote YSB, collaborative education model is indeed holding the key. The paper suggested that the enrichment of the online portal – the Yunus and Youth tube (YYtube)– with the concepts of collaborative education will be an appealing platform from where YSB can be taught to aspiring young minds of the future.

JEL: I23 - Higher Education and Research Institutions; I25 - Education and Economic Development

**KEYWORDS:** Collaborative Consumption, Collaborative Lifestyle, Collaborative Education, Yunus Social Business, Sharing Economy, Online Education

# **INTRODUCTION**

The concept of Collaborative Consumption (CE) has been prevailing in the economy over decades. It started to popularize with the concept of sharing private jet to sharing luxurious holiday resorts/ apartments, a concept to share luxurious products or services. Due to higher price of luxurious assets, this concept of sharing or collaborative consumption provided opportunity to many customers to avail those products and services by sharing access and ownership (Wali et al., 2012). In recent times, there has been substantial increase in the popularity of the concept of 'sharing' Economy. It can be further described by peer to peer sharing of goods and services over economic community, sharing of used DVDs, cars, or even a drilling machine through an internet 'neighbor.'

In addition, this concept has been brought into lime light in front of business world again by Rachel Botsman in TedTalks, and also by the book 'What's Mine is Yours: The Rise of Collaborative Consumption' (Botsman and Rogers, 2010). Diverse array of products and services are gaining popularity for sharing day by day, starting from simple concept of DVD and Audio CD sharing through many websites all around the world, to the sharing of houses, home appliances and electronics and cars (Wali et al., 2012). Eventually, this concept started to spread in education arena as across the world 200 million young people leave school without the skills they need to prosper in life (UNESCO, 2012). This paper has highlighted some ongoing collaborative education models and proposed to develop similar models for the spread of YSB concept.

# **RISE OF THE CONCEPT OF 'SHARING' ECONOMY**

In most of the households, there are many possessions that have never been used more than once or twice in its entire product life. Some of the belongings are not even part of daily use, for example a lawnmower or a drill machine (Botsman and Rogers, 2010). These commodities hardly add any value in storing up or displaying. On the other hand, there are many household items that may require use of these commodities. In reality, requirement is not for the commodities, but the usage of that products or services. Buying these commodities and storing up most of the product life can be termed as under-utilization of resources. The theory of collaborative consumption addresses this problem by sharing resources between parties who are in need, thus ensuring maximum utilization of resources (Botsman and Rogers, 2010).

Car or ride sharing is a popular example of collaborative consumptions. On average, a car owner parks the car more than 60% of its lifetime at the parking shed (Shaheen et al., 2012). This finding have urged many companies to develop car sharing initiatives, which range from the simple ride shares, for example ZipCar and the rideshareonline, where people advertise over internet portals regarding destination of journey and the route intend to take, and then offer seats so that anyone interested can take the ride. Similarly, professional car sharing companies buy cars and then advertise over internet for sharing use to different destinations. This concept is successful in different parts of the world where people are more inclined towards driving to work, as it has not only led to economical benefits of better cost advantage per mile per person by sharing the cost. It has also led to benefits of maximization of usage and reduction in carbon emission levels (Shaheen et al., 2012).

The basic concept of collaborative consumption is the 'dematerialization' of resources, which spells out that people look for access to goods and skills rather than ownership (Sacks, 2011). This fact is further emphasized and suggested the emerging need of 'access' over the need of 'ownership' (White, 2011; and Young, 2011). This move from 'ownership' to 'access' have made the concepts of collaborative consumption along with the new businesses and portals that have sprung with it, a growing sensation in the economy.

According to Botsman and Rogers, 2010, this sharing economy can be divided into three forms:

- 1. Renting and sharing of products, for example drill machines and cars,
- 2. Re-ownership of a product (selling of second hand DVDs), also termed as the Mesh economy, where product life-cycle is extended and other people can enjoy the service benefits of a product after the user has his or her share of utilization.
- 3. Collaborative lifestyle this is the highest form of sharing, where people share their intellectual assets and skills as and when necessary and this is the form of sharing further discussed in this paper in collaboration with education.

Trust is the most of important factor of this 'sharing' economy. The model of collaborative consumption is based on the pillar of trust and many studies have highlighted this same fact (Sacks, 2011; White, 2011; Young, 2011 and Shaheen et al., 2012). Collaborative consumption is only possible for consumers and households to share goods and skills if they can trust the party they are sharing with and they are convinced of the return they are going to receive. In this regard, Botsman and Rogers (2010), and White (2011) have suggested the concept of online social accountability and online statements of how trustworthy a person can be. This can be measured by details like how many successful on time deliveries has been made by a person in eBay or Amazon, or how was the quality of the product sold, did it match with the description and image posted in the website or not. Different studies have shown that due to the widespread use of internet and the social media, along with e-commerce sites, the level of trustworthiness of a buyer and supplier can be measured to a good extent (Botsman and Rogers, 2010; White, 2011).

# COLLABORATIVE LIFESTYLE – PAVING THE PATH TO COLLABORATIVE EDUCATION

The concept collaborative lifestyle is the sharing of intellectual assets and skills over the economy. This form of sharing has a very profound implication and its applicability is made very much feasible by the present high speed internet portals all around the globe. In the advent of the 2020s, a good portion of the world is connected via internet and benefits of internet services can be understood in different parts of the world. The technological advancement lowered cost structure, investment and operating costs and collaborative business also started to take advantages out of it. As a result, more and more organizations started to come up with different array of products and services (Young, 2011; Shaheen *et al.*, 2012; Rachel and Botsman, 2010).

One in every five young people in developing countries need second chance for education to gain skills for work (UNESCO, 2012). One of the factors for leaving education is that the cost of education has risen over times and some form of education has gone out of reach for certain groups of people. For example, let us consider the case for a young business executive or a regular student from a country where main language is not English, plans for a Master's degree from a good business school that requires GMAT score. The learner can get into some assistance courses that has professional teaching instructions for appearing GMAT examination but often it would be difficult to spare time on a regular basis for these courses, or it could be out of reach due to course fees. So what are the options? The answer can be simply provided by visiting the Khan Academy's website (Khan 2012), looking up for the GMAT preparation videos, and download a GMAT official preparation guide from the official GMAT website and practice at a time convenient for her. The student will have the support at home and can avail the lecture at convenient time. Any student or learner can enjoy the same benefit from any part of the world.

In another case, a young executive or innovator wants to perform better by exhibiting good business awareness, passing up strong and stimulating new ideas. Although some of these qualities require practical experience, others require learning recent business practices that have been appreciated by the business world. Given workload, yet again, most of the time it is feasible. So what are the options to have all the new business updates in one platform? The innovator can log in to TedTalks website, look for themes in business that are relevant to areas of interest. Watching some of the videos that are given by very outstanding speakers and movers and shakers of the business world will help to get the desired edge in the concerned business sector.

Both these examples require further education. The easiest option is to log into websites dedicated in developing the skill base of the users through the sharing of skills of intellectuals who has accomplishment in their own fields. This is the concept of Collaborative Education – to have a portal where people can share their educational expertise. People with experience, knowledge and qualification will share learning with the people in need. It can be free, on payment basis or both. This will benefit those who will be sharing in terms of building up their network, profiles and images in the community. We have just introduced two websites as examples to collaborative education, but in effect there are many websites and portals around the world which act in the same way, maybe not by sharing videos, but by information through text and presentation.

A similar example of one such platform is common among many university students, who use cloud computing facilities to share subject specific lectures and tutorials with students from other disciplines. The ease of access to these cloud storage websites (DropBox and Microsoft SkyDrive) makes this sharing and collaboration of education a very simple matter. Whenever a student needs to learn something specific which may not be directly related to the classes, need to do log into these sharing portals and look for the course materials that may help him or her learn the concept. Although sharing of lectures started in

informal ways, today there have been emergences of websites providing interactive lectures by instructors in the World's best universities and also sponsored and controlled by them to maintain a very high quality of instruction.

Three such appropriate examples are Coursera, EDX and Udemy, all of which are sponsored by and instructions provided by the very top ranking universities of the world and it is free of cost. Everyone can log into these sites and look for particular courses to enrich own skill base. The future of the education will be in collaborative education of young aspiring individuals all around the world. They may also go through tests and exams that they need to learn conveniently and cost effectively.

The collaborative education not only addresses the problem of cost of education but also has the added advantage of convenience and distance learning. It is true that only the presentation files and the course materials are not good enough to recreate the classroom learning situation but with the help of multimedia, there are now interactive and non interactive videos that are shared across internet which provide closest to classroom experience. This form of education is already being popularized by the websites already mentioned in this section along with the increase in popularity in AudioBooks and Podcasts from iTunes stores, which serve the very same purpose.

# BUILDING A PLATFORM FOR COLLABORATIVE EDUCATION (CE) ON YUNUS SOCIAL BUSINESS (YSB)

The concept of Yunus Social Business has gained popularity for solving a recurring problem in the society with the help of the daily operations of the business. Success is measured in terms of addressing the problem rather than maximizing profit. Investors will only get back the initial investment and profit would be reinvested for future expansion (Yunus, 2010). YSB and collaborative consumption stem more or less from the same root – there are people in the economy with commodities who can and want to contribute services; there are people in the economy who are in need of those services (Yunus et al., 2010). Both these ideas lean heavily on the effective sharing of information and the use of a good information medium, notably the internet (Palmer et al., 2012). Given this similar core, the 'sharing' economy can be used as a new platform to promote Yunus Social Business.

It has been observed from experiences in teaching social businesses that the traditional classroom approach is effective to ignite the idea of the socially responsible business practices (Wali, 2012). The concept of Yunus social business is far more effective than other business concepts due to the fact that Social Business offers the growth of investments made by the concerned parties as well as aiding in the development of the society (McCann, 2011). Proper and effective means of teaching social business requires the exposure to the real scenarios of bottom of the pyramid people (BoP), and other highly underdeveloped areas to give the students/learners an idea of how social business can help in the development of the society and this is where the usefulness of collaborative education comes into play (Wali, 2012).

Although it may be possible for the students/learners in the underdeveloped countries to grasp the concept of YSB, due to the ease of their exposure to the needs of the society and BoP people, it may be challenging for the students/learners of the highly developed countries to get a clear and interactive picture of the benefits that can be contributed by YSB. Whereas, this segment can significantly contribute by thinking outside the box approach only if they can get the exposure of BoP society and market. They can develop social business in this arena by addressing social issues from that particular community. The model of 'YY (Yunus & Youth) tube,' can be a leading example in this arena. While YY tube gets access to talks of Professor Yunus in different events, they can make it available for all interested learners across the world to view those talks. Besides, some universities and institutions are offering courses on SB as

well. However, those courses are not in reach of most of the learners. Apart for 'YYtube' website, online courses or lectures can be developed in collaboration with universities, academic institutions, above stated websites or even with some new websites.

If we could build up an interactive internet based platform where the concepts YSB will be explained by its pioneers as well as shown how those have been implemented and helped local population to develop, then not only the platform will give hands on exposure to students/learners who are interested in it but also will show the world the real effectiveness of YSB. In addition, due to the fact that this platform is global, the knowledge, experiences and exposure can be shared at a global level. So, due to the practical nature of the Yunus Social Business education, the concept of collaborative education can help to create a very good platform for YSB. One day, it might even possible that a collaborative education service is developed with the YSB model where profit would be reinvested for further development. Premier fees would be charged to solvent collaborative education users to cross subsidize the cost of other users or educational institutions.

# CONCLUSION

This paper has proposed a new integration of the concept of collaborative consumption principles in education sector to show how it can be as effective as a form of collaborative education which will not only act in reducing the cost of education through sharing but make it more interactive, interesting and convenient. The use of the collaborative education concept is developed to create platform for teaching YSB. This paper only proposes the usefulness that can be gained in developing a platform for sharing the knowledge and experiences of YSB to aid in the learning of its concepts. There are further research scopes in both evaluating this proposal and also in working to create a more detailed platform in line with this proposal.

# UNDERSTANDING THE B-SHARE DISCOUNTS: EXCHANGE RISK IN CHINESE STOCK MARKET

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#### ABSTRACT

This study investigates the impact of the exchange risk on B-share discount by developing an estimation model to decompose the valuation differential into two components, the difference between the expectation of future exchange rate and spot exchange rate and the difference between A- and B-shares' expected returns, which both contain the exchange risk. The empirical tests explore that USD and HKD real exchange rate does not affect the A-shares' expected returns in both stock exchanges. But when moving down to the industry level, the exposures to USD and HKD exchange risk become less obvious. Although it is hard to detect the clear pattern of impacts of real exchange rates on B-share discounts through A- and B-share expected returns, it is quite easy to find the effects of the Changes of exchange rates CNY/USD and CNY/HKD on B-share discounts. Based on this study, if the investors expect strong CNY in the future, then the B-share discounts will decline.

# **INTRODUCTION**

As the largest emerging economy in the world, interests in Chinese equity markets have grown rapidly in recent years. Since investors seek higher returns and international diversification, a flood of foreign capital has come into the Chinese financial markets. For the "stability" reason, Chinese government imposes different restrictions on establishing separate classes of shares for domestic investors and for foreign investors. The Chinese equity market is characterized by the existence of multiple classes of shares: for domestic shares (A-shares), there are three major categories with a strict segmentation: state shares held by central or local government or solely state-owned enterprises, legal entity shares held by other enterprises, the foreign partners of incorporated joint ventures and non-bank financial institutions, and tradable publicly owned shares held by individual investors. State and legal entity shares are prohibited from trading. Only the last category can be freely traded in the stock exchange. A limited number of listed companies issuing A-shares for domestic investors also issue B-shares for attracting international capital. The two groups of shareholders have the identical cash flow rights and voting rights as well as obligations, except that A-shares are denominated by Chinese Yuan (hereafter CNY), while B shares trading in Shanghai Stock Exchange (SHSE) are denominated by U.S dollar (hereafter USD) and those trading in Shenzhen Stock Exchange (SZSE) by HK dollar (hereafter HKD). The law of one price (LOP) is violated in such kind of segmented markets. Bailey (1994) firstly found the large price discounts of Chinese B-shares relative to A-shares. However, in stock markets with the similar structure, the foreign class shares commonly command significant price premia instead of discounts.

Since February 2001, the Chinese government opened up the B-share market to domestic investors. On November 2002, the China Securities Regulatory Commission and the people's Bank of China (PBOC) introduced the Qualified Foreign Institutional Investor (QFII) to trade Chinese A-shares. There was a substantial decline of B-share discounts after the lifting of restrictions on foreign ownership in Chinese stock market, but surprisingly the B-share discounts do not fade away. Due to the complex market structure and various monetary controls, the Chinese B-share price discounts are hard to be explained and remain a puzzle (Bailey, Chunag and Kang 1999), which makes the topic interesting. Most studies explain B-share discounts by different risk levels, information asymmetry or market liquidity, but they cannot get the consensus.

The most obvious difference between A- and B-shares is the currency denominations. The exchange rate can affect both ex ante and ex post returns. In one way, the B-share holders receive the dividends by CNY, while the stock price is denominated by USD or HKD. When they evaluate the stock, they need to convert CNY denominating dividends into USD or HKD. So the exchange rate change will affect the stock price. Besides that, by Adler and Dumas (1983, 1984) and Solnik (1983), asset trading with prices quoted in a particular currency in a country has exchange risk associated with random domestic currency movements. Domestic investors and listed companies have no efficient way to hedge their currency risk perfectly, which probably makes the currency risk as a systemic risk in Chinese stock market. By this way, the stocks denominated by USD, HKD or CNY probably load different currency risks.

Before July 2005 China adopted a de-facto fixed exchange rate system, under which the exchange rate was pegged to the USD and seriously regulated by the government. There was no variation of CNY exchange rate, so it is impossible to study the effect of CNY exchange risk on the B-share discounts. This paper aims to study how the exchange risk affects the remaining B-share discounts after the lifting of restrictions on foreign ownership and foreign exchange deregulation in China. This paper just investigates whether exchange risk has the impact on B-share discounts, but does not claims that exchange risk is the only or main influence of B-share discounts. This study contributes in following aspects. Firstly, study the relation between exchange risk and Chinese B-share discounts, which has not been sufficiently studied. Secondly, unlike most previous studies, this paper test an international asset pricing model that might account for differences in shareholders' expected returns, and then use different betas to explain the B-share discounts.

#### LITERATURE REVIEW

Over decades, researchers have tried to explain the price disparity appearing in segmented markets in various ways. Previous studies explained the B-share discounts mainly by information asymmetry. B-shareholders have better accounting information which gives them some advantage (Bao and Chow, 1999). However, Chakravarty, Sarkar and Wu (1998) argue that even though B-shareholders have better accounting information, they have less other information because of language barriers and culture differences, etc. Lee, Rui and Wu (2008) recheck this issue after ownership deregulation and find that "there is no asymmetric information between investors in the two markets". Therefore, information asymmetry is not the sole reason to explain the all these differences.

Illiquidity effect is another explanation of B-share discounts. Amihud and Mendelson (1986) explain that investors ask for higher expected returns on relatively illiquid shares to compensate for increased trading costs.

As the third explanation, risk differentials hypothesis is based on the fact that Chinese markets are highly speculative and full of domestic investors who are highly risk tolerant and focus on short-run returns. However, foreign investors have relatively higher degree of risk-aversion. Sun and Tong (2000) find a positive relationship between B-share discount and risk levels. In contrast with previous studies, Chen, Lee and Rui (2001) fail to find significant evidence supporting the differential risk hypothesis.

Instead of risk consideration, some researchers study the price parity from the supply and demand view. Gordon and Li (1999) propose that Chinese investors suffer from strict legal restrictions, which keep them away from diversifying their portfolios globally. Facing to limit investment opportunities and insufficient stock supply, domestic investors push up A-share prices, leading to B-share discount. However, the argument above is contradictory to international asset pricing model. Eun and Janakiramanan (1986) developed asset pricing models under a specific form of barrier to international investment and pointed that the shares owned by foreign investors should be traded at a price premium relative to the corresponding shares owned by domestic investors. They argued that since foreign investors can invest

globally, they can diversify the specific country risk and ask for lower risk compensation. In this sense, foreign investors require lower expected returns and pay price premium, which is opposite to the supply and demand explanation.

To sum up, the explanations for the B-share price discounts are not conclusive, and mainly focus on the problems brought by market segmentation. Along with the gradually financial deregulation in China, especially in exchange rate regime, the degree and impact of market segmentation are changing. However, there are only a few articles analyzing the impact of the absence of restriction since 2001 on the B-share discount and only one paper studying the effect of exchange rate system reform. Due to the data limitation, all the papers above fail to discuss the effect of exchange risk on B-share discount. Until 2005, exchange rate system reform gives Bae, Li and Shi (2009) the chance to examine the topic. They show that under a more flexible exchange rate system, investors' attitude toward exchange risk contributes to the increase of B-share discount. Because investors expect CNY long-run appreciation, they are willing to hold the CNY assets rather than USD assets. Although they check the influence of more floating exchange rate system, the sample period is too short, from June 9, 2005 to August 31, 2005, to be reliable. More studies on the relation between exchange risk and B-share discounts are needed.

# METHODOLOGY

#### Data

The primary data set consists of weekly stock returns on six industry portfolios in SHSE and four industry portfolios in SZSE. The whole sample period is from Feb. 2001 to Sep. 2011. The pre-reform sample period starts from Feb. 2001 to Jul. 2005, but only post-reform sample (Jul. 2005 to Sep. 2011) is used to do the multivariate regressions, since this study focuses on how exchange risk affects the B-share price discounts after exchange rate reform (start from Jul.2005).

The weekly Chinese A- and B- share prices, Chinese stock index data and the forward exchange rates of USD/CNY from the NDF market were retrieved from Bloomberg database. The global stock index data (ACWI) are provided by Morgan Stanley Capital International research centre. The major currency index (MCI) is available from the U.S. Federal Reserve. The exchange rates of USD/CNY and HKD/CNY follow the official exchange rate.

#### Model

The B-share price difference is defined as the logarithmic ratio of the B-share price converted to CNY over the A-share price

$$D_{i,t} = \ln\left(\frac{PB_{i,t}X_{M,t/CNY}}{PA_{i,t}}\right) \tag{1}$$

Where  $PA_{i,t}$  and  $PB_{i,t}$  are the spot price of A- and the corresponding B- share for company *i*;  $X_{M,t/CNY}$  is the spot exchange rate of CNY against currency *M*. The equation (1) can be decomposed as follow.

$$D_{i,t} \approx \ln\left(\frac{E_t(X_{CNY/M,t+s})}{X_{CNY/M,t}}\right) + \gamma(E_t(r_{Ai}) - E_t(r_{Bi})) + \varepsilon_t$$
(2)

Where  $E_t(X_{CNY/M,t+s})$  is the expectation of CNY exchange rate against currency *M* at time t+s. From equation (2), we can see that mathematically B-share price discount is broken down into

two parts: one affected by exchange rate of CNY against foreign currency M, the other affected by the expected returns of A- and B-shares. Equation (2) demonstrates that theoretically exchange risk may affect the B-share discount in two ways. It will affect the price disparity directly, which can enlarge or narrow down the price parity by CNY appreciation or depreciation. It can also affect the return process. These two effects could be opposite and cancel out each other. So probably the exchange risk affects the B-share discount by two directions, but cannot be observed directly from the change of discount magnitude.

This study firstly investigates the impacts of the return and volatility of exchange rate exposure on the weekly stock returns.

$$E_t(r_{A,it}) - r_f = \alpha_i + \beta_{ADMi}^n (R_{At,n} - R_{ft}) + \beta_{AIMi}^n (R_{ACWI,t} - R_f) + \beta_{X1i}^n R_{CNY/BKT,t} + \beta_{X2i}^n R_{CNY/BKT,t}^2$$
(3)

$$E_t(r_{B,it}) - r_f = \alpha_i + \beta_{BDMi}^n (R_{Bt,n} - R_{ft}) + \beta_{BIMi}^n (R_{ACWI,t} - R_f) + \beta_{X3i}^n R_{M/BKT,t} + \beta_{X4i}^n R_{M/BKT,t}^2$$
(4)

Then generate the expected returns of A- and B-shares by estimated betas, using it as the independent variables in the discount regression. The discount model is based on the equation (2).

$$D_{it}^{n} = C_{i}^{n} + \gamma_{1i}^{n} E_{t}(r_{A,it}) - \gamma_{2i}^{n} E_{t}(r_{B,it}) + \gamma_{3i}^{n} \ln\left(\frac{E_{t}(X_{CNY/M,t+s})}{X_{CNY/M,t}}\right) + \varepsilon_{t}^{n}$$

$$D_{it}^{n} = C_{i}^{n} + \gamma_{1i}^{n} E_{t}(r_{A,it}) - \gamma_{2i}^{n} E_{t}(r_{B,it}) + \theta_{1i}^{n} R_{CNY/M,t} + \theta_{2i}^{n} R_{CNY/M,t-1} + \theta_{3i}^{n} R_{CNY/M,t-2} + \frac{n}{4i} R_{CNY/M,t-3} + \theta_{5i}^{n} R_{CNY/M,t-4} + \varepsilon_{t}^{n}$$
(5)

The theoretical model restricts the coefficients of the expected return of A- and B-share to be identical and the coefficient of  $\ln\left(\frac{E_t(X_{CNY/M,t+s})}{X_{CNY/M,t}}\right)$  to be one. Here the author looses this restrictions and test whether the coefficients of the expected return of A- and B-share are identical or not, since probably one market has more impacts on the B-share discounts than the other. The empirical model also check whether the coefficient of  $\ln\left(\frac{E_t(X_{CNY/M,t+s})}{X_{CNY/M,t}}\right)$  to be one. The non-deliverable forwards (hereafter NDF) of USD/CNY can be used as the expectation on USD/CNY exchange rate at time t+s, naturally generated by market. However, there is no available NDF data of HKD/CNY. For robustness check and regression in SZSE, the author uses spot and lagged exchange rate to represent the expectation of exchange rate.

#### **RESULTS AND DISCUSSIONS**

Table 1 shows that in SHSE the A-share market is integrated in the global market with market beta 0.2279 at the 0.01 significant level. But A-share market in SHSE does not exhibit any type of residual exposure to exchange rate risk. Unlike the A-share market, B-share market in SHSE behaves differently. The coefficient of the global market is not statistically significant, showing that B-share market does not integrated into the global market, which is unexpected. The coefficient of the return of USD exchange rate against the major currency index is 0.6033 at the 0.1 significant level.

Model	$r_{SHAindex} - r_f$	$r_{SHBindex} - r_f / r_{tbill}$	$r_{SZAindex} - r_f$	$r_{SZBindex} - r_{f}$
Constant	0.1720	0.5215/0.5249	0.3358	0.2767
	(0.6723)	(1.5386)/(1.5500)	(1.1344)	(0.9994)
$r_{acwi} - r_f / r_{tbill}$	0.2279***	0.0868/0.0812	0.1671*	0.2183**
,	(2.6203)	(0.6529)/( 0.6114)	(1.6647)	(2.0267)
r <sub>CNY/BKT</sub>	0.2339		0.2601	-
CNI/DRI	(1.1584)	-	(1.1159)	
$r_{CNY/BKT}^2$	-0.0340		-0.0250	-
0.007,2007	(-1.0532)	-	(-0.6736)	
r <sub>USD/BKT</sub>		0.6033*/0.6102*		-
	-	(1.7511)/(1.7734)	-	
$r_{USD/BKT}^2$		-0.2052**/-0.2056**		-
	-	(-2.2328)/(-2.2407)	-	
r <sub>hkd/bkt</sub>				0.3798
·	-	-	-	(1.3816)
$r_{HKD/BKT}^2$				-0.1347*
	-	-	-	(-1.7679)
$R^2$	0.0717	0.0745/0.0739	0.0382	0.1025

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Table 1. A- and B-index	102103510115 (	πι πητειπατιοπαι	assel Dricing model

This table shows the A- and B-share's exposures to the exchange risk of the denominating currencies on the market level. $r_{SHAindex}$ ,  $r_{SZAindex}$ ,  $r_{SZBindex}$ ,  $r_{SZBindex}$  indicate the returns of A- and B-share index in SHSE and SZSE.  $r_{acwi}$  is the return of the global index constructed by Morgan Stanley. $r_{CNY/BKT}$ ,  $r_{USD/BKT}$ ,  $r_{HKD/BKT}$  are the returns of real exchange rates of CNY, USD and HKD. $r_f$ ,  $r_{tbill}$  are the Chinese and U.S. risk free rate.\*\*\*,\*\* and \* indicate significance at the 1, 5 and 10 percent levels respectively.

It indicates that if the USD depreciates, then the B-share investors will expect lower returns on the B-shares. The exposure to the variance of the exchange rate return is negative (-0.2052) at the 0.05 significant level. Similar with SHSE, the global market beta of A-shares is positive (0.1671) and significantly different from zero at the 0.1 significant level. The currency risk betas are still not statistically significant. For the B-share market, unlike SHSE, the null hypothesis (at less than the 0.05 level) that the global market beta is equal to zero is rejected. The exposure to the return of exchange rate HKD/BKT is insignificantly different from zero, but the exposure to the volatility of exchange rate returns is negative and statistically significant.

In order to test whether the exposures of each industry is the same, table 2 provides the results of the industry portfolio exposures to exchange risk for SHSE and SZSE separately. All in all, it is very hard to find the residual exposure to exchange risk on the industry level, even for B-shares, which is contradict with the results found on the market level. But still some industry portfolios have significant residual exposures to the first-moment or the second moment of exchange rate. When the domestic market risk is included, the global market betas become less significant in some industries. Furthermore, all the industry portfolios with significant global market betas are negatively related to global equity market, meaning that when the global market goes down, the Chinese stock market tends to act reversely.

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Model	$r_{manufacture}$	r <sub>real estate</sub>	$r_{retail\&wholesale}$	r <sub>service</sub>	$r_{transportation}$	$r_{other}$
Constant	0.0672	-0.0138	0.0501	0.0363	-0.0744	0.2656
	(0.2775)	(-0.0504)	(0.1807)	(0.1625)	(-0.3179)	(0.9773)
$r_{Aindex} - r_{f}$	0.9991***	1.1297***	0.9041***	0.8895***	1.0174***	1.1271**
	(17.5878)	(17.6258)	(13.8868)	(16.9895)	(18.5167)	(17.6696
$r_{acwi} - r_f$	-0.0763	-0.1515	-0.0365	-0.0709	-0.1883**	-0.1677*
,	(-0.9154)	(-1.6122)	(-0.3826)	(-0.9236)	(-2.3386)	(-1.7935
$r_{CNY/BKT}$	0.0410	0.1303	0.2129	-0.0634	0.0773	0.2535
0117211	(0.2140)	(0.6034)	(0.9705)	(-0.3595)	(0.4176)	(1.1797)
$r_{CNY/BKT}^2$	0.0187	0.0096	0.0455	0.0146	0.0096	-0.0226
	(0.6129)	(0.2773)	(1.2986)	(0.5185)	(0.3246)	(-0.6603)
$R^2$	0.5395	0.5398	0.4299	0.5191	0.5601	0.5476
	Panel B. Asset p	ricing models for	industry portfolios of I	B-shares in Shangl	nai Stock Market	
Model	$r_{manufacture}$	r <sub>real estate</sub>	r <sub>retail&amp;wholesale</sub>	r <sub>service</sub>	$r_{transportation}$	$r_{other}$
Constant	-0.0203	0.0365	0.2014	0.0139	-0.1998*	0.1249
	(-0.1380)	(0.2200)	(1.1927)	(0.1033)	(-1.7006)	(0.7143)
$r_{Bindex} - r_{f}$	0.7622***	0.9990***	0.8943***	0.8234***	0.8317***	0.9177**
Binuex J	(29.3344)	(34.0931)	(29.9947)	(34.6882)	(40.1056)	(29.7391
$r_{acwi} - r_f$	0.0094	-0.1667***	-0.0561	0.0922*	-0.0537	-0.0930
ucwi - j	(0.1631)	(-2.5687)	(-0.8495)	(1.7543)	(-1.1700)	(-1.3617
$r_{USD/BKT}$	0.0392	0.0184	-0.0134	-0.2526*	0.0464	0.2932*
USD/BKI	(0.2615)	(0.1091)	(-0.0780)	(-1.8458)	(0.3882)	(1.6479)
$r_{USD/BKT}^{2}$	0.0054	-0.0156	-0.0181	0.0035	0.0116	-0.0199
USD/BKT 2	(0.1344)	(-0.3446)	(-0.3942)	(0.0957)	(0.3629)	(-0.4177
$R^2$	0.7722	0.8154	0.7770	0.8253	0.8611	0.7782
R			industry portfolios of A			0.7702
Model		$r_{acture} - r_{f}$	$r_{realestate} - r_f$	r <sub>transport</sub>		$r_{other} - r_f$
Constant		).0385	-0.0898	-0.32		-0.0421
		).3755)	(-0.4294)	(-1.9	278)	(-0.1760)
$r_{Aindex} - r_f$		725***	0.9456***	0.8804***		0.9489***
innucx j	(4	6.6237)	(22.2423)	(26.0103)		(19.5069)
$r_{acwi} - r_f$		0.0124	0.0378	-0.0	700	-0.1720**
,	(-(	).3559)	(0.5319)	(-1.2362)		(-2.1135)
$r_{CNY/BKT}$	-0.1304*		0.0016	0.21	40*	0.0416
		1.6142)	(0.0095)	(1.63	326)	(0.2208)
$r_{CNY/BKT}^2$	-(	0.0011	0.0033	0.00	)75	0.0133
- 2	· · · · · · · · · · · · · · · · · · ·	0.0817)	(0.1264)	(0.3	/	(0.4446)
$R^2$		0.8905	0.6547	0.72		0.5837
Model		Ŭ	industry portfolios of I $r = r$			r _ r
		$r_{facture} - r_{f}$	$r_{real  estate} - r_f$	r <sub>transport</sub>		$r_{other} - r_f$
Constant		.1227 .1223)	-0.0129	-0.27		0.3286
$r_{-}$ , $-r$			(0.0701) 1.0516***	(-2.2 0.879		(1.3248) 0.9361***
$r_{Bindex} - r_{f}$	0.9867*** (41.5095)		(26.3547)	(33.2416)		(17.3591)
$r - r_{-}$		133***	-0.1157	-0.10		-0.3014***
$r_{acwi} - r_f$		2.6490)	(-1.6110)	(-2.2		(-3.1053)
$r_{_{HKD/BKT}}$	· · · · · · · · · · · · · · · · · · ·	0.0213	0.2613	0.290	/	0.3951
· HKD/BKT		).1963)	(1.4317)	(2.40		(1.6014)
$r_{HKD/BKT}^2$	· · · · · · · · · · · · · · · · · · ·	0568**	0.0050	0.00	· · · · · · · · · · · · · · · · · · ·	-0.0848
IIKD/DKI =		1.8794)	(0.0989)	(0.14		(-1.2375)
$R^2$	,	.8724	0.7360	0.8		0.5455

Table 2. Regression results of the international asset pricing model

These regressions estimate the international asset pricing model by weekly data over the time period July 22, 2005 to September 30, 2011 for industry portfolios in SHSE and SZSE respectively.  $r_i$  is the industry return,  $r_{Aindex}$  is the A-share market return,  $r_{Bindex}$  is the B-share market return.  $r_{acwi}$  is the global market return.  $r_{CNY/BKT}$ ,  $r_{USD/BKT}$ ,  $r_{HKD/BKT}$  are the returns of real exchange rates of CNY, USD and HKD. $r_f$ ,  $r_{tbill}$  are the Chinese and U.S. risk free rate.\*\*\*,\*\* and \* indicate significance at the 1, 5 and 10 percent levels respectively.

Model	$D_{manufacture}$	D <sub>real estate</sub>	D <sub>retail&amp;wholesale</sub>	$D_{service}$	$D_{transportation}$	D <sub>other</sub>
Constant	-0.8199***	-0.7568***	-0.7889***	-0.4113***	-0.5695***	-0.5900***
	(-73.6437)	(-73.8628)	(-76.6368)	(-40.0408)	(-53.8240)	(-66.5993)
$E_{r_A}$	0.0015	-0.0018	0.0007	-0.0004	0.0025	0.0017
· A	(0.3299)	(-0.5447)	(0.1541)	(-0.0780)	(0.6377)	(0.4822)
$-E_{r_B}$	-0.0028	-0.0036	-0.0027	-0.0043	-0.0024	-0.0021
· B	(-0.6003)	(-1.1216)	(-0.6963)	(-1.0646)	(-0.5928)	(-0.5803)
$(E_t(X_{CNY/USD t+s}))$	8.1401**	7.1564**	7.6729**	7.6133**	7.9443***	7.9222**
$n\left(\frac{-U(UCNT/USD,t+S)}{X_{CNY/USD,t}}\right)$	(2.4653)	(2.0231)	(2.2717)	(2.4185)	(2.6314)	(2.4183)
$R^2$	0.0911	0.0986	0.1002	0.1050	0.0995	0.1159
	Panel B. Disc	ounts regression	with 12 month NDF	CNY/USD excha	nge rate	
Model	$D_{manufacture}$	D <sub>real estate</sub>	D <sub>retail&amp;wholesale</sub>	$D_{service}$	$D_{transportation}$	D <sub>other</sub>
Constant	-0.9342***	-0.8561***	-0.8958***	-0.5074***	-0.6646***	-0.6904***
	(-75.8399)	(-83.8384)	(-83.7630)	(-50.8155)	(-55.9540)	(-71.3876)
$E_{r_A}$	0.0024	-0.0014	0.0010	0.0014	0.0031	0.0020
' A	(0.8119)	(-0.6515)	(0.3686)	(0.3595)	(0.9457)	(0.7338)
$-E_{r_B}$	-0.0027	-0.0038**	-0.0030	-0.0036	-0.0025	-0.0023
· B	(-0.9481)	(-2.0479)	(-1.3817)	(-1.0281)	(-0.7303)	(-0.7593)
$(E_t(X_{CNY/USD t+s}))$	4.0079***	3.4872***	3.7490***	3.4368***	3.3889***	3.5535***
$n\left(\frac{E_t(X_{CNY/USD,t+s})}{Y}\right)$	(13.5718)	(14.2359)	(14.6848)	(11.8399)	(11.2596)	(12.6929)
\ ^CNY/USD,t /						

Table 3. Regression results of the discount model in SHSE

This table shows the impacts of the change of CNY exchange rate against USD and A-and B-shares' expected returns on the B-share discounts.  $D_i$  is the B-share discount of each industry portfolio.  $E_{r_A}$  and  $E_{r_B}$  indicate the A- and B-shares' expected return of each industry portfolio.  $\ln\left(\frac{E_t(X_{CNY/USD,t}+s)}{X_{CNY/USD,t}}\right)$  indicates the difference between the expected CNY exchange rate and the spot CNY exchange rate against USD.

Panel A of table 3 gives the results of the short-run impact of CNY/USD on the B-share discounts. The coefficients of the log difference between the expected exchange rate and spot exchange rate for all 6 industries are positive and significantly different from zero at less than 0.05 level. In a short word, if CNY is expected to appreciate, then the B-share discounts will become smaller. In addition, inconsistent with the theoretical model, the A- and B-share's expected returns generated by the previous regressions do not significantly affect the B-share discounts. The long-run results are similar as the short-run (table 3, panel B).

Since HKD is pegged on USD, the results in SZSE are supposed to be the same as ones in SHSE. Unexpectedly, table 4 shows that 2 out of 4 expected returns of the B-share portfolios have the significant impacts on the B-share discounts, while there is no A-share expected returns affecting the B-share discounts. The changes of CNY/HKD exchange rate have less obvious impacts on the B-share discounts in SZSE with lower significant level, especially for transportation industry which is not influenced by the change of the exchange rate CNY/HKD at all.

However, both short-run and long-run models for SHSE and SZSE contain significant constant, indicating that there are still some elements affecting the B-share discounts. Since this study's purpose is only about discovering the relation between exchange risk and B-share discounts, here does not discuss the other possible reasons.

Model	$D_{manufacture}$	$D_{real  estate}$	$D_{transportation}$	$D_{other}$
Constant	-0.7204***	-0.6499***	-0.5677***	-0.7701***
	(-71.9911)	(-62.7973)	(-40.4273)	(-66.0146)
$E_{r_A}$	0.0000	0.0036	0.0013	0.0024
·A	(0.0195)	(1.1908)	(0.3063)	(0.7251)
$-E_{r_B}$	-0.0050*	-0.0032	-0.0061	-0.0063*
· B	(-1.6874)	(-1.0924)	(-1.2930)	(-1.7515)
$R_{\frac{CNY}{HKD},t}$	5.0114	4.6380	-1.8616	5.9360
	(1.3256)	(1.1867)	(0.3510)	(-1.3461)
$R_{\frac{CNY}{HKD},t-1}$	7.5088**	6.9197*	0.1135	9.7857**
$\overline{HKD}, t-1$	(1.9651)	(1.7500)	(-0.0212)	(-2.1998)
$R_{\frac{CNY}{HKD},t-2}$	8.4790**	7.3858*	2.3373	10.4448**
$\overline{HKD}, t-2$	(2.1768)	(1.8302)	(-0.4262)	(-2.3051)
$R_{\frac{CNY}{HKD},t-3}$	7.6629**	8.2859**	5.7665	9.2531**
	(2.2460)	(2.3442)	(-1.2003)	(-2.3287)
$R_{\frac{CNY}{HKD},t-4}$	4.4384	4.8283	2.5936	4.5449
$\overline{HKD}^{,t-4}$	(1.3052)	(1.3706)	(-0.5423)	(-1.1486)
$R^2$	0.0838	0.0899	0.0272	0.1061

Table 4. Regression results of the discount model in SZSE

This table shows the impacts of the change of CNY exchange rate against HKD and A-and B-shares' expected returns on the B-share discounts.  $D_i$  is the B-share discount of each industry portfolio.  $E_{r_A}$  and  $E_{r_B}$  indicate the A- and B-shares' expected return of each industry portfolio.  $R_{\underline{CNY}_t}$  indicates the change of CNY exchange rate against HKD.

#### CONCLUSION

This study investigates the impact of the exchange risk on B-share discount by developing an estimation model to decompose the valuation differential into two components, the difference between the expectation of future exchange rate and spot exchange rate and the difference between A- and B-shares' expected returns, which both contain the exchange risk. The empirical tests explore that USD and HKD real exchange rates do matters for the B-share markets in SHSE and SZSE on the market level, however, CNY real exchange rate does not affect the A-shares' expected returns in both stock exchanges. The results indicate that if USD appreciates, B-shares' expected return will increase. Since USD appreciation makes Chinese exports more competitive but increases the import costs for Chinese companies, one possible explanation for this result is that most companies issuing B-shares are import oriental instead of export oriental. It somehow makes sense because the companies issue B-share for raising foreign currencies in the strictly currency-controlling period, indicating that they are lack of foreign currency to import goods from other countries. The market index regressions also show that higher USD and HKD real exchange rate volatility will decrease the B-share expected return. The result is contrary to Zhang & Li's study (2002), which states that there only exists interrelation between CNY exchange rate and Chinese A-share market, but cannot find such a relation between CNY exchange rate and Chinese B-share market. But when moving down to the industry level, the exposures to USD and HKD exchange risk become less obvious, unlike the results on the aggregate market level. Although it is hard to detect the clear pattern of impacts of real exchange rates on B-share discounts through A- and B-share expected returns, it is quite easy to find the effects of the Changes of exchange rates CNY/USD and CNY/HKD on B-share discounts. Based on this analysis, if the investors expect strong CNY in the future, then the Bshare discounts will decline. This conclusion is confirmed by the long-run and short-run period results in both stock exchanges.

Recently there are many hot discussions on CNY internationalization. The Chinese government is trying to promote the exchange rate reform and turn CNY a global one. In addition, according to the Hong Kong Monetary Authority, CNY cross-border trade conducted through Hong Kong reached Rmb1.9tn (\$300bn) in 2011. Thus the exchange market and stock market should be co-integrated more in the future. The exchange risk will associate more closely with the B-share discounts. Since the Chinese government has

the concern on the consolidation of A- and B-share markets, it is meaningful for the policy maker to understand how the exchange risk affects the B-share discounts.

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# THE BETA-INDEX AND BETA-MOBILITY IDEA AND EMPIRICS

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# ABSTRACT

In this paper we will evaluate and measure the risk of conflict for an individual country, which is linked to international tensions (see Abolfathi, 1978 for the concept): in other words, how to measure to what extent local conflict in a country is driven by international tension/ global factors. We provide a basic theoretical analysis of a new index, what we call a beta index, of conflicts driven by international tension. The beta index is argued to capture the global roots of local conflicts. We then offer an empirical foundation to the beta index by calculating the beta values for 92 nations. We also examine the intertemporal movement of the beta index of these 92 nations to explore how international tensions traverse over time from one region to another. In order to do that we introduce a new concept, beta mobility, that is akin to the measures of income mobility in the context of income distribution.

JEL: D74, Q34, G12

KEYWORDS: Beta Index, Beta Mobility, Conflicts, International Tension.

# INTRODUCTION

In recent years economics has turned its attention to the explanation of conflicts. Some interesting microeconomic models have been developed, yet there are still gaps that motivate current research. The main aim of this paper is to understand how to evaluate and measure the risk of conflict for an individual country, which is linked to international tensions (see Abolfathi, 1978 for the concept): in other words, how to measure to what extent local conflict in a country is driven by international tension/ global factors. For modelling's sake, we propose the following:

Assumption 1: Conflicts in a country/ region are created and undertaken by a group of local agents. It is like organising a terror attack. Thus, conflict in our model is akin to terrorist attacks and armed insurgency on a local/ regional target. We call the group a terror group.

*Assumption 2*: We assume that there is a national/ regional government that tries to prevent this local conflict either by enforcing existing law, or by offering economic incentives. We call the law enforcement authority the law maker.

The above two assumptions can be sustained from the standard model of an arms race between nations as expounded and developed by Intriligator and Britto (1985). Instead of a terror group and a law maker, they have two nations engaged in conflict.

*Assumption 3*: We take the technology of a terror attack as given. We also assume the technology of law enforcement as given.

Assumption 4: We assume that the terror group needs both financial resources and technological and logistic resources in order to carry out the terror strike, or conflict. The terror group depends on an international group/ country/ organisation for these resources. In a similar vein, the lawmaker needs

resources, technology and information that they can raise locally in part, and receive in part from an international group/ country/ organisation.

Assumption 5: The world is split into two or more rival groups, and for each nation/ region the terror group and law makers receive help from distinct rival groups consisting of many agents, or decision-makers. The split of a nation into rival groups (terrorist groups and law enforcers) is partly a product of international tension, or international rivalry.

*Assumption 6*: For ease of handling, we focus only on the decisions by rival (international) groups to fund terrorist activities. We do not model the funding of the law maker, which we take as a datum.

Thus, in our model there are many decentralised decision-makers at the global level who belong to rival groups and sponsor a set of terrorist activities with the ultimate end of reducing the influence of their rival group. The other group's members behave in a similar vein. It is like a re-enactment of the Cold War, which relies on of continuing international tension between rival global players/ groups.

At the micro level, for each decision-maker the question is how to allocate their resources, or assets, to alternative terrorist groups located in different nations across the globe. The goal for these decision-makers is to get a return from any terror attack sponsored by them. The cost is the resource cost as well as the risk of losing/ wasting scarce resources, either because the terror attack is foiled by the relevant law maker, or because the local agents divert the resources for their personal use — the classic case of moral hazard.

Our model therefore portrays conflicts as the following: there are several production units of terror attacks in each country of our world. The funding, logistics and technology are provided by global financiers (or players) who are the relevant decision-makers in our model. Actual conflicts are carried out by foot soldiers — mostly as terror attacks or open insurgencies. These terror attacks can range from a simple demonstration to actual warfare. The higher the casualties from an attack, the greater are the return for the global financiers/ decision-makers.

The main proposal of this paper is to posit conflicts as a product of continuing international chasms, splits and differences of political and social ideologies in our modern world. Thus we argue that conflicts are, to some extent, driven by international tension, or global, ideological and geo-political factors. Notwithstanding global influence, local factors such as income inequality, income growth or lack of it, and political institutions can and do exacerbate conflicts.

This paper starts with a basic theoretical analysis of a new index, which we call beta index, of conflicts driven by international tension. We offer the beta values of 92 nations for which we have data from 1970–2004. Then we examine the inter-temporal movement of the beta index of these 92 nations to explore how international tension traversed time from one region to another. In order to do that we introduce a new concept of beta mobility akin to the measures of income mobility in the context of income distribution. We reach a conclusion that the role of international tension has not changed much in determining local/ country-specific conflicts, subject to the limitations of the proposed measures.

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#### ACCOUNTING AND FINANCIAL REPORTING SYSTEM REFORMATION IN BELARUS Tatsiana Rybak, Ministry of Finance of the Republic of Belarus

#### ABSTRACT

The development of participation of the Republic of Belarus in the global economic integration gives raise to new problems of the national accounting and financial reporting system to be solved. The conceptual framework of that system development is determined in the draft Accounting and Financial Reporting Act. The author worked out recommendations on organizational, methodological, methodical and human resources management support for the process of the Belarusian accounting and financial reporting laws harmonization with the International Financial Reporting Standards.

**JEL**: M410

**KEYWORDS**: globalization, integration, Belarusian accounting and financial reporting laws, International Financial Reporting Standards application infrastructure.

#### INTRODUCTION

Belarus is involved in national accounting and financial reporting system harmonization with International Financial Reporting Standards ("IFRS"). Focusing on IFRS is called forth by the economic globalization tendency, as well as by strong necessity for the country's full-scale integration to the global economic environment.

The basic concepts of the national accounting and financial reporting system development are determined in the draft Accounting and Financial Reporting Act ("Act"), the first revision of which was adopted by the House of Representatives of the Belarusian National Assembly.

Creation of proper IFRS application infrastructure and institutional framework perfection might contribute to most efficient realization of the drafted system measures, which are aimed at adequate information environment to be implemented to follow the global business tendencies and processes and meet the utmost demands of the concerned users.

# **REGULATORY FOUNDATIONS FOR HIGH-QUALITY FINANCIAL REPORTING IN BELARUS**

The draft Act implemented the provisions of the Belarusian President's Directive No. 4 dated 31/12/2010 related to business initiative development and business promotion in Belarus, particularly stipulating IFRS integration in the accounting process and taking into consideration the laws of the Customs Union member countries. Within the framework of the regional integration, in December 2010 the Republic of Belarus ratified the Agreement on Free Capital Flow and Financial Trade Promotion and Agreement on Trade in Services and Investments between the Common Free Market Zone member countries. The Republic of Belarus committed to apply the harmonization requirements in conformity with the IFRS.

When developing the draft Act, a number of alternative considerations and suggestions have been analyzed for further development of the national accounting system. This resulted in two major streams to be followed, i.e.:

IFRS-harmonized mandatory consolidated financial reporting to be made by all parent companies of social responsibility, e.g. banks, public corporations, insurance companies;

Belarusian accounting and financial reporting system development, taking into consideration the IFRS provisions.

The draft Act further stipulates for legislative initiative of IFRS implementation to be advanced. IFRS application procedure shall be determined by the Council of Ministers of the Republic of Belarus in cooperation with the National Bank of the Republic of Belarus.

For more efficient IFRS implementation, it is proposed to advance more stringent requirements to performance of socially responsible companies' chief accountants, since their professional background dominates users' confidence in financial reporting, risk assessment for investors. The draft Act stipulates for specific attestation of pretenders to the socially responsible company's chief accountant qualification. The Chartered Accountant certificates will be issued by the Ministry of Finance of the Republic of Belarus, following the successful attestation.

The draft Act provides the basis for the national accounting and financial reporting system qualitative development, focusing on reliable reporting, being user-friendly and adaptable for proper business decision-making, rather than on mere accounting process. For this purpose, the draft Act integrates the accounting and financial reporting principles (accrual, understandability, relevance, comparability, veracity, etc.) and implements a new type of regulation – national financial reporting standard.

The national financial reporting standard system would incorporate the national standards in accounting policy, accounting of assets, liabilities, income, expenses, additional explanatory information, consolidation, accounting of specific business types.

The complete set of financial statements, as stipulated by the draft Act, embodies balance sheet, profit and loss statement, changes in equity statement, cash flows statement, explanatory notes.

The draft Act stipulates general provisions of reporting process assessment. New assessment methods and revised approach to exchange difference reporting have been further introduced.

The draft Act provides for simpler reporting of business transactions. Any primary instrument templates (other than those mandatory by law) may be developed and approved by each company management independently.

Systematic measures related to accounting and financial reporting system, as stipulated by the draft Act, aim at providing top reliability and comparability of financial information, as reported in different branches of economy.

# INSTITUTIONAL FOUNDATIONS FOR HIGH-QUALITY FINANCIAL REPORTING IN BELARUS

When ratified, the new Accounting and Financial Reporting Act might require a set of related measures and decisions to be taken and effected for proper IFRS implementation in the Republic of Belarus. Let's point out the major problems to be solved.

The Belarusian accounting community has not been represented and involved in decision-making and elaboration process of international standards. This makes infeasible to react promptly and revise the national standards to comply with IFRS, as changing from time to time. This problem may be solved by closer cooperation with IFRS Committee and International Federation of Accountants and by giving way for the national policy to be announced during the international standards development and perfection process.

The Ministry of Finance of the Republic of Belarus cooperates with IFRS Foundation and World Bank experts in this concern. The Ministry of Finance is represented continuously with the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) of United Nations Conference on Trade and Development, as well as with the CIS Coordination Council on Accounting.

Belarus currently organizes the IFRS texts to be available in the national language. Presently, the Ministry of Finance of the Republic of Belarus deals with legal and organizational issues of agreement with IFRS Foundation for the waiver of copyright within limited territories. As far as IFRS interpretation is concerned, foreign practice demonstrates certain distortions in translated standards to be often found, inasmuch as some definitions trend to be missing in certain jurisdictions, and no adequate terminology is available. Moreover, reference to Prof. Y. Sokolov, "the major translation problems relate to proper understanding of ideological and lexicological aspects of evident and correctly translated definitions, rather than from linguistic inadequacy" (Sokolov, 2007). The problem of proper understanding of IFRS terminology is expected to be solved by specific glossary compilation and publication.

IFRS application would require a public compliance supervision system to be organized. For this purpose, a specific supervising authority should be created, as practiced in other countries, for example, German Federal Financial Supervision Authority, Financial Reporting Council in the United Kingdom, Financial Services Authority of France (Krylova, 2008). Many countries with transitional economies involved similar measures. Thus, Pakistan organized its Compliance Monitoring Section of the Securities and Exchange Commission, Turkey – Capital Markets Board (Krylova, 2008), Kazakhstan – Agency on Regulation and Supervision of the Financial Market and Financial Organizations (Duisebek, 2008). Some countries delegate the IFRS compliance control functions to stock exchanges. Thus, the Admission Division and the Sanction Commission of the SWX Swiss Exchange apply penalty to bond issuers in case of failure to comply with the financial reporting requirements (Review of practical implementation issues relating to IFRS, 2008).

IFRS-harmonized mandatory consolidated financial reporting having been introduced, stronger requirements to audit will be implemented for such reporting reliability verification. Pursuant to the draft Audit Act, the first revision of which was adopted by the House of Representatives of the Belarusian National Assembly, IFRS-based consolidated financial reporting of socially responsible companies shall be subject to mandatory audit. Audit companies dealing with such audit shall comply with extra requirements of having at least two staff auditors qualified under IFRS and International Audit Standards. For external audit quality verification, national auditors' associations are to be engaged.

Also, economic education sets forth major problems to be solved for the Belarusian accounting and financial reporting system reformation. No centralized system for IFRS education and advanced training is currently organized in Belarus. Short-term seminars and training courses realized from time to time by audit and advisory companies fail to benefit to the problem solution. For these purposes, a wide-scale program of accounting practitioners' advanced training is planned to be implemented.

The accounting and financial reporting system reformation would require a set of measures to be enforced for vocational accounting education perfection, i.e.: revision of higher and secondary vocational curriculums, focusing on IFRS advanced training and their practical application, publication of appropriate tutorials and teaching aids, re-training of lecturers, etc.

# CONCLUSION

• organizational measures - cooperation with IFRS Committee and realization of the Belarusian representation for joint solving of problems related to the national accounting and financial reporting laws harmonization with IFRS; organization of IFRS texts to be continuously available in the national language and freely accessible to the accounting community; creation of public IFRS compliance supervision system;

• methodological support – legislative requirement of IFRS application in Belarus, stipulation of accounting and financial reporting principles, new approaches to recognition, classification and assessment of reporting elements;

• methodical support – creation of a IFRS-integrated system of national accounting and financial reporting standards;

• human resources management – perfection of the existing system of accounting practitioners' training, as well as advanced training of company managers, auditors, economists, financiers.

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# THE OPTIMAL DIVIDEND YIELD RANGE: THE CASE OF EUROPE AND SPAIN DURING THE PERIOD 2000-2009

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### RESUMEN

Using monthly data during the period 2000-2009 for 163 European and Spanish companies, we show a clear, non-linear relationship between dividend yields and total stock returns earned by stockholders. This relationship is an inverted, U-shaped relationship in the sense that stocks within a specific range of Dividend Yield (DY) have superior returns and are the only ones with positive average returns throughout our sample period. We also find that stocks within a portfolio with superior and positive returns are the ones that show lower risk when risk is measured by the portfolio's average standard deviation. The relationship between DY and risk exhibit a U shape. Our results contradict the Miller and Modigliani (1961) irrelevance theorem and reveal the existence of an optimal dividend yield policy. These relationships persist when we relate current DYs with returns and risks one month, three months, six months, and one year ahead, especially in the case of Spanish companies. Our ten-year sample includes a period with financial market downturns and recoveries, which helps reduces biased results related to bull or bear markets. Additionally, we found that the nonlinear relationship between DY and risk, and DY and returns, cannot be explained by different market capitalizations.

**JEL:** G11, G15.

KEYWORDS: Dividend Policy, Portfolio Management, Trading Strategies

# INTRODUCTION AND RELATED LITERATURE

This paper addresses a fundamental question in corporate finance: is the value of shareholders' wealth affected by a firm's dividend policy? Since Miller and Modigliani (1961, herein MM) and Black (1976) published their seminal papers, dividends have been a very fruitful field of study. The irrelevance theorem of MM indicates that all dividend policies are equally optimal and that investment policy alone determines stockholder wealth in frictionless markets.

Following Allen and Michaely (2003), we echo that understanding dividend policy is important not only because of the amount of money involved and the repeated nature of the decision but also because payout policy is closely related to and interacts with most firms' financial and investment decisions.

This paper's results allow us to reject the hypothesis of independence between dividend yield (DY) and the total return earned by stockholders. A nonlinear relationship exists between both variables, which shows that the dividend payout policy is at an optimal level (proxied in this work by the DY). These empirical results line up with the hypothesis that payout policy influences investment decisions, which supports the works by DeAngelo and DeAngelo (2006 and 2007, herein DD). DD (2006) refute the MM proposition and show that it affects dividend policy matters and stockholders' wealth, which are not only determined by investment policy.

In addition to the relationship between DY and returns, we test the hypothesis of independence between DY and risk and find evidence contrary to it.

496

Our work shows a clear, short-term relationship between DY and stock returns. For two sample sets--the 50 European blue-chip companies and a group of the 113 most liquid Spanish companies listed--we find an inverted, U-shaped, contemporaneous relationship between return and DY. In the case of the Spanish companies, this relationship persists when relating current DY with returns one month, three months, six months and one year ahead.

To our knowledge, this paper is the first to document the existence of an optimal level of dividend yields with a ten-year sample for two different markets and to find that the return achieved at this optimal level is inversely related to the portfolios' risk profile when measured by sigma.

The European and Spanish markets are particularly useful for studying DY and dividend strategies because little research on either dividend or investors' behavior in response to the release of new information contained in the dividends exists. Existing studies in the Spanish and European stock market focus mainly on the dividend policy rather than on dividends as an investment strategy tool.Additionally, other published papers focus mainly on the relationship between DY and profitability, without analyzing the relationship among other variables we analyze in our work (e.g., risk).

Our results for these two samples are likely transferable to other countries, particularly those where firms pay regular dividends; these same hypotheses can be tested and this model can serve as an important reference when setting out portfolios based upon DY.

# METHODOLOGY

We analyze two companies' samples from the European and Spanish markets. The study covers ten years, from January 2000 until December 2009. This ten-year sample includes a period with financial market downturns (i.e., 2000, 2001, 2002, 2008) and recoveries (i.e., 2003, 2004, 2005, 2006), and this fact helps to reduce biases in the results related to bull or bear markets. During this time period, we calculate monthly company dividend yields (DY), returns, total risk (standard deviation of returns, or sigma) and capitalization.

The monthly stock returns  $(r_t)$  studied in our sample reveal these data's non-normal behavior. We reject normality for the European and Spanish return data. We have also estimated a risk measure for every company  $(\sigma_t)$  at each month's end. This measure reflects the company's total risk during month t, and it has been calculated as the standard deviation of the company's daily returns during the previous three months.  $DY_t$ , at the end of month t, have been calculated using the sum of dividends paid during the previous twelve months (t, t-1,...., t-11) and dividing this amount by the current month end adjusted closing price  $(p_t)$ .

Using DY as a proxy for the payout policy, we state our first hypothesis:

H<sub>1</sub>: There is independence between  $r_t$  and  $D_t/P_t$ , and the payout policy does not affect investors' wealth. We can also say that if  $r_t$  is independent of the dividend policy, then the risk level borne by the stockholder, measured as the returns' standard deviation ( $\sigma_t$ ), will also be independent of the payout policy and will only depend on the investment policy. We state our second hypothesis:

H<sub>2</sub>: There is independence between the risk,  $\sigma_t$  and  $D_t/P_t$ , and the payout policy does not affect investors' risk.

To test these hypotheses, we construct a portfolio series ranked according to DY and evaluate whether enough statistical evidence exists to support the independence hypotheses. We rank our monthly observations according to DY. After sorting all assets according to DY, we eliminate the assets with DY over ten percent; with the remaining assets, six portfolios are created. Portfolio #1 is created from the assets with DY equal to 0, portfolio #2 is created from the assets with DYs between (0-2%], portfolio #3 is created from the assets with DYs between (2%-4%], portfolio #4 is created from the assets with DYs between (4%-6%], portfolio #5 is created from the assets with DYs between (6%-8%] and portfolio #6 is created from the assets with DYs between (8%-10%]. Choosing these six portfolios represents a balance between the tractability and clarity of exposition reasons and the need to identify groups with enough difference (according to DY) among them.

Every month for each portfolio, we calculated the following variables: average return, average volatility and average capitalization. We completed the same process for both European and Spanish markets. We collected a total of 720 ( $120 \times 6$ ) portfolio observations for each market. The relationship between the  $DY_t$ of a given portfolio and its return can be viewed as a short-term predictive relationship because, for each month *t*, the  $DY_t$  is calculated with data coming from the previous twelve months (t, t-1, t-2, ..., t-11), and the total return is calculated with the current end-month *t* data. We will demonstrate there is a nonlinear relationship between DY and returns and a nonlinear relationship between DY and risk; we test statistical and economic significance of these relationships in the next section.

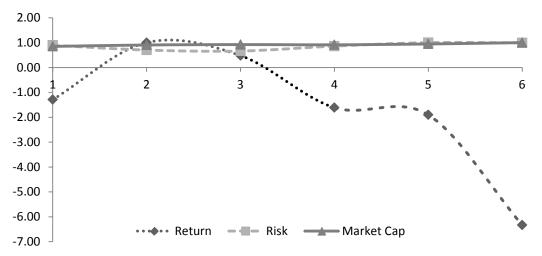
# **EMPIRICAL RESULTS**

#### European Stock Market

Our results show that the relationship between  $DY_t$  and  $r_t$  is nonlinear. It follows an inverted U-shape figure.

Figure 1: European portfolios average return, risk and capitalization. Data has been standardized for ease

of comparability.



In figure 1, we can graphically appreciate the relationships between DY and returns, DY and risk and DY and capitalization. We do not observe any difference in the portfolios according to market capitalization. It seems that the relationship between DYt and  $\sigma$ t follows a U-shaped relationship, meaning that the portfolios with less risk are in the middle range of DYs and are those with higher returns. To test the statistical significance of these relationships, we examine the means equality for the six portfolios.

Finally, to further assess the relationship between DY and returns, DY and sigma, and DY and capitalization, we construct three contingency tables. We find we can reject the hypothesis of independence in two cases (returns and sigma), but DY is independent of market capitalization. Spanish Stock Market

To verify the robustness of the previous results, we performed a same study using a sample of 113 Spanish firms. We first check the mean and variance equality for the six portfolios comprised by Spanish firms (see Table 2).

Table 1: European portfolios'test.

	Portfolios' Returns		Portfolios' Sigmas		Portfolios' Cap	
	Statistic	P-value	Statistic	P-value	Statistic	P-value
Test for the equality of group variances						
Levene's test	26,715	0.000	16,686	0.000	18,165	0.000
Brown Forsythe test	6,622	0.000	5,236	0.000	12,735	0.000

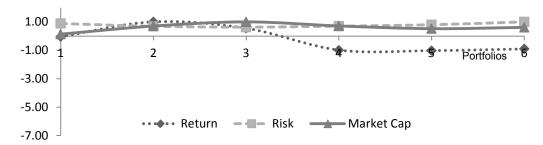
Before we compare means, we calculate the Levene's test and the Brown-Forsythe test. Both tests are used to test if the six portfolios have equal variances. Table 1 shows the estimation results and the corresponding p-values. With these results, we can reject the null hypothesis of homogeneity of variances in the case of portfolios' return and portfolios' sigma, but not in the capitalization case. In the capitalization case, we can accept means equality for the six portfolios, indicating that there is statistical independence between DY and capitalization.

#### Table 2: Spanish portfolios`test.

	Portfolios' Returns		Portfolios' Sigmas		Portfolios' Cap	
	Statistic	P-value	Statistic	P-value	Statistic	P-value
Test for the equality of group variances						
Levene's test	33,453	0.000	56,837	0.000	171,600	0.000
Brown Forsythe test	11.94	0.000	123,448	0.000	53,618	0.000
Test for the equality of group means						
Welch's t test	13,725	0.000	102,808	0.000	74,464	0.000

We first calculate the Levene's test and the Brown-Forsythe test to study if the six portfolios have equal variances. Table 2 shows the estimation results and the corresponding p-values. With the results of table 2, we can reject in every case the null hypothesis of homogeneity of variances and of means equality.

Figure 2: Spanish portfolios average return, risk and capitalization. Data has been standardized for ease of comparability.



Again, the inverted U-shaped relationship between DY and total returns emerges, and again the U-shaped relationship between DY and risk shows up. In this sample, differences can be observed in relation to market cap. Portfolios with stocks not paying DYs are the ones with lower market caps.

The contingency tables lead us to reject the hypotheses of independence between DY and returns  $(H_1)$ , DY and sigma  $(H_2)$ , and DY and market cap. These results indicate that DYs provide information about the risk-return characteristics of stocks and that DYs give significant information.

#### A closer look at the optimal dividend yield range.

Here, we examine more closely the optimal interval that emerged from our previous analysis. Investors should pick stocks with DYs in the (0%-4%) range and should maintain their investments away from stocks with other DYs. However, this is a wide range, so we should divide it into four portfolios with a variation of 1% DY and test whether we can narrow our selection.

Table 3: Average Return and Standard Deviation for the European and Spanish Samples considering the (0%-4%] DY range.

	European sample	Port #1 DY(0%-1%]	Port #2 DY(1%-2%]	Port #3 DY(2%-3%]	Port #4 DY(3%-4%]
Ν		420	1162	1373	1133
Average Return		0.0053	0.0058	0.0032	0.0027
Ν		420	1155	1350	1088
Average Standard D	Dev	0.3772	0.2981	0.2842	0.3200
	Spanish Sample				
Ν		1,026	2,135	2,136	1,534
Average Return		0.0161	0.0113	0.0085	0.0051
Ν		1,022	2,138	2,139	1,518
Average Standard D	Dev	0.3166	0.2977	0.2797	0.2861

We can observe that the four portfolios have positive average returns and also that they maintain a low risk profile, always lower than the other portfolios' risk profiles. Portfolios composed by stocks in the (2%-3%] DY range are, for both samples, the ones with lower risk, while the range with higher returns have DYs between (0%-2%], again for both markets.

The independence tests show that, although the results for the four portfolios are very similar, we can reject the hypothesis of equality of group variances and group means. In the case of the risk study, we can reject the hypothesis of independence between DY and risk, for both samples, so the results for the (2%-3%] interval are very robust.

Nevertheless, in the returns study, we can accept the hypothesis of independence between DY and returns, so the average returns are very similar across the (0%-4%] interval.

#### **CONCLUDING REMARKS**

Similar to Baker and Wurgler (2004), we conclude that dividends matter to shareholders. In this way, our results support the point in DD (2006) that payout policy is important and contradict the argument in MM that only investment policy matters.

In this work, we test two hypotheses: the hypothesis of independence between DY and the total return earned by stockholders (H1), and the hypothesis of independence between DY and the risk borne by stockholders (H2). Our findings show that DY and total stock returns are not independent (H1) and that this relationship is, in the short term, a non-linear, inverted-U relationship. Independent risk and DY (H2) are also not independent and exhibit a U-shaped relationship.

For two samples--the 50 companies in the Eurostoxx50 and 113 Spanish companies-- over the past 10 years, this work shows an inverted, U-shaped relationship between DY and returns, past 10 years this work shows an inverted, U-shaped relationship between DY and returns, revealing an optimal DY level when considering shareholders' total returns. We find an optimal DY range in the sense that portfolios constructed with stocks paying dividends in these levels are the ones attaining superior returns. For both samples, this DY interval is (0%-4%]. These portfolios also do not have high risk, so return is not the compensation for risk; to the contrary, they exhibit the lowest risk levels. The results are statistically significant and they are not specific to a declining or an advancing market because the sample period covers both.

We find that the U-shaped, contemporaneous relationship between DY and risk is maintained when relating the current DY with the risk one month, three months, six months and one year ahead, indicating the short-term, predictive value of DY. The short-term, predictive power of DY in relation to returns is confirmed in the Spanish case for up to one year; however, in the European case, the predictive power is limited to one month ahead.

These results contradict the semi-strong form of the Efficient Market Hypothesis and are more in line with alternative explanations such as the behavioral finance findings of Hodrick (1992), Jiang and Lee (2007) and Nieto (2010).

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# TOURIST PERCEPTIONS REGARDING SERVICE AT RECREATIONAL PARKS IN THE STATE OF QUINTANA ROO

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# ABSTRACT

This research focuses on tourist parks, which have attracted enormous attention for their business potential, as well as their attractiveness to tourists who visit the state of Quintana Roo, offering as they do a variety of products and services that meet the needs of all market segments. In this sense, the present research aims to understand and assess the perceptions of tourists visiting Quintana Roo in light of the "model of the flower of service," and its applicability to recreational parks like Xcaret, Xel–Ha and Xplor. The study is a descriptive cross, using factor analysis with which to detect complementary, value added services, as well as factors which significantly impact the perception of visitors, so as to advance development of new marketing strategies.

JEL: M3, M31, M39

**KEYWORDS:** Marketing Services, Flower of Service, Perception, Recreational Park.

# INTRODUCTION

This increasing incidence of visitors to Quintana Roo suggests that tourism service providers have reliable information which enables them to measure tourists' perception of services offered; continuously improve processes and competency of staff providing services; assess the level of value added, in tangibles and intangibles, acquired by the visitor; assess the degree of loyalty that can be created, and the motivation to encourage others to live the experience of purchasing the services; and finally, to create various marketing strategies to improve indicators of competitiveness of the organizations.

Among the wide range of tourist services in Quintana Roo, one encounters high level hotel infrastructure; a diversity of regional, national and international restaurants; travel agencies; transportation of all types, their including a world-class airport; and, various recreation centers. The latter are better known as recreational parks, which are characterized as tourist, social and entertainment areas. They represent an ideal choice for tourists who want to experience the fullest possible destination for their visit, and are geared to those who want to enjoy their favorite activities during their vacation. The entertainment offered by these parks can be oriented to a single concept, or a gamut of attractions; and, in both cases, with all services included in the cost of entry to the site, or by additional payment for access to products and services offered on the territory.

Experiences Xcaret is a 100% Mexican owned group, dedicated to entertainment resorts. This company has over 25 years experience operating in Quintana Roo and Yucatan. Xcaret Experiences Group has three business units which have become a benchmark in the state: Xcaret, Xel-Ha and Xplor. These three parks receive a quarter (25.41%) of the tourists visiting the state of Quintana Roo (Xcaret experiencias, 2012).

These recreational parks offer different services, aimed at different market segments. Xcaret Experiences Group has won awards because their business model has made them more competitive.

In short, the objective of this research is to ascertain and assess the perception of complementary services for tourists visiting Xcaret, Xel-Ha and Xplor; to identify both strengths and weaknesses so that sensible marketing strategies that encourage these parks to become more competitive can be generated.

The content of this article incorporate literature, data analysis and methodology in a descriptive approach to multivariate techniques, results and conclusions, as well as limitations and research directions.

#### LITERATURE REVIEW

In this section, the authors review three major constructs as follows: tourism and marketing services, perception of value, and the flower of services. Each of these constructs was measured in this research design.

#### Tourism and Marketing Services

Jimenez (2005) mentions that to talk about tourism is to talk about a complex issue requiring a multidisciplinary approach that improves the formal study design. Tourism can have reference to marketing, business, management, psychology, sociology, history, etc. (Gunn, 1994). Integrating these in a study of tourism from the point of view of recreation was challenging the idea prevailed that each discipline stands alone (Ziperovich, 2004).

In this study marketing is viewed as the activity, set of institutions, and processes for creating, communicating, delivering and exchanging offering that have value for customers, clients, partners, and society at large (AMA, 2012).

Services are economic activities that create value and provide benefits to customers, in specific times and places, as a result of producing a desired change in (or for) the recipient of the service (Lovelock, Reynoso, D'Andrea and Huete, 2004). The characteristics of services are that they are intangible, heterogeneous, and simultaneously produced and consumed (Zeithmal, Bitner and Gremler, 2009).

Services marketing may be referred to as a system of action that seeks the best way to satisfy needs and wants through exchange of a generally intangible satisfier for one of tangible value, in a mutually beneficial manner (Saldaña and Cervantes, 2000). Academic interest in service marketing arose primarily in the early eighties (Berry and Parasuraman, 1993).

#### Perception of value

An important aspect in the marketing of services is perception, the process by which people select, organize and interpret stimuli into a meaningful and coherent whole. Perception is how you see the world (Lamb, Hair and McDaniel, 2011). Companies should recognize the importance of the keys, or signals, that create customer value, identifying the important attributes and then designing signals which communicate these attributes.

The development of a map of service requires the identification of key activities involved in the production and provision of services (Shostack, 1992), through which are carried out a series of actions based on specific inputs by which the clients live their experience.

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# Model Flower of Service

The maps constitute an excellent way to understand the totality of the service experience. In this case they are divided into two components, those services that facilitate the provision, or form essential parts of it; and those that increase the value of services to customers (Lovelock, et al 2004).

The eight groups that form the petals are called the flower of service in which ways can be sought to increase the perceived value, and make customer interactions with the organization easier.

Of the eight petals that make up the flower of service, care should be taken with four of them; they are contact, hospitality, care, and special cases, since these elements generate value to customers. The other items, information, handling requests, billing and payment, provide the service.

Speaking of the "information" petal, customers need relevant information, directions to specific points hours of operation, prices, directions for use, warnings, conditions of sale, reservation confirmations, etc.

The "contact" petal implies a level of communication that can inquire about customer requirements and develop an appropriate solution; the consultations envisioned consist of immediate counseling by trained staff answering the question, "what do you recommend?"

"Handling requests", concerns customers ready to buy then accepting the request, placing orders and making reservations. This process should be polite, fast and accurate. The key is to minimize the time and effort required of both the company and the customer. An example is reservations.

"Hospitality" should reflect the pleasure of welcoming customers requesting the service. This can increase or decrease the level of customer satisfaction. Some examples of hospitality are the greeting, transportation, food and beverage, security, etc.

"Care" considers that during a visit, customers often need help with their personal items, such as child care, pet care, vehicle parking, luggage management, etc.

"Special cases" is for services that do not fall within the normal service provision, such as supplying infant needs, special dietary requirements, and assisting those with diabilities; handling complaints and suggestions, dealing with refunds, and repair of defective goods.

"Billing" is a common element of service. It must be agile, stimulating faster payment: some examples are statements, invoices for individual transactions and announcements of the amount payable.

"Payment" is the exchange of money for service. Some companies accept payment by credit and debit card, using phone or internet. Other alternatives include chips, vouchers, coupons and tickets paid in advance.

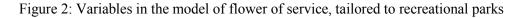
# DATA AND METHODOLOGY

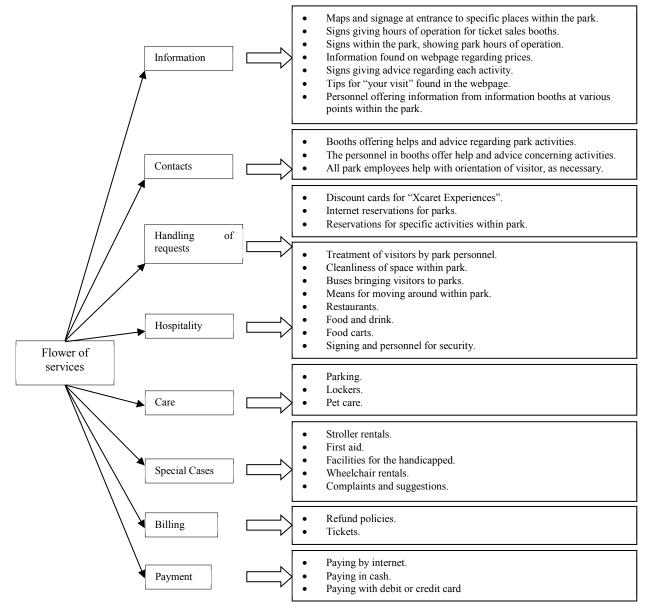
In developing the research design, it was determined that the type of methodology is conclusive and descriptive, since the data is pure and generates structures; and, is transversal owing to the fact that data was collected only once. The investigation was conducted by questionnaire, consisting of a series of written questions to which subjects responded (Malhotra, 2008).

The size of the sample was applied to an infinite population since there is an annual influx of visitors among the three parks of 1, 994.929 visitors. The sample obtained was 123, resulting in a margin of error of 9%.

Data collection was carried out with the support of social service students during the month of October 2012: the study sample was limited to those who visited any of the three parks: Xcaret, Xel-Ha and Xplor.

The data collection instrument meets the criteria of validity and reliability. The model of flower service has eight factors that reveal general variables of the three parks which can fluctuate, and whose variation is susceptible to measurement or observation (Hernandez, Fernandez and Baptista, 2010). The type of variable used is reflective, as shown in Figure 2.





Source: Adapted from flower model for recreational parks service.

The instrument used has content validity as it complies with the degree to which the measurement represents the concept or the measured variable (Bohrnstedt, 1976). The content domain of the variables is defined based on the literature. Also the theoretical empirical model underlying the construct, the eight petals of the flower model of service, includes three stages (Carmines and Zeller, 1991).

- 1. The theoretical relation of the concepts is established
- 2. Concepts are correlated by means of factor analysis.
- 3. Empirical evidence is interpreted according to the level at which the validity of the construct is clarified.

The confidence level of the data collection instrument is the degree to which it produces consistent and coherent results (Hernandez Fernandez and Bautista, 2010). The Cronbach alpha coefficient, a measure of internal consistency was applied, and yielded a result of 0.829.

The data analysis was done using factor analysis, a technique used to simplify the many complex relationships that can exist between a set of observed variables (Pérez, 2006).

# RESULTS

Characteristics of sample: 100% of respondents had visited at least one park in 2012; 49.6% were male, and 50.4% female; the mean age was 25.35 years.

To test the relevance of the factorial analysis, mediation by Kaiser-Meyer-Olkin (KMO) was performed, comparing the magnitude of the observed correlation coefficients with the magnitude of partial correlation coefficients, yielding 0.766, which indicates the relevance of this analysis.

According to this analysis, the factors with highest reliability are as follow:

Special case: in this block we found that for the visitor important aspects of supplementary services related to first aid, which is associated with the recreational activities offered in the parks. Also, as part of the culture of fairness, variables highlight facilities for the disabled, and wheelchair rental. This block closely relates to variables such as reimbursement policies, and payment for services, which are both associated with the efficiency of operational procedures.

Information: this factor is related to aspects of communication that the visitors receive during their stay in the park.

Information Technology and Communication: use of the internet via the website, for pricing, use tips and reservations for different services, are important to tourist, as shown in this block.

Care for Infants and Pets: this block shows the visitor's interest in the care of children, or pets.

Hospitality: is an important factor because it relates to perceptions of cleanliness and safety.

Food: the importance for visitors to have variety of restaurant services for consumption of food and beverages appears in this block

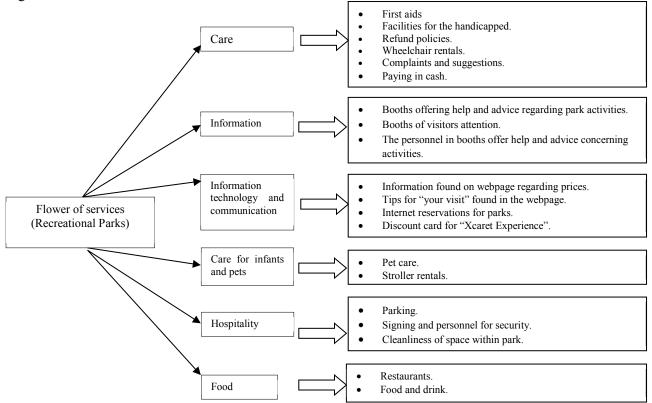


Figure 4: Final Classification of variables for Recreational Park

Source: Authors.

#### CONCLUSIONS

After analysis of the results it can be deduced that the extra services that establishe the flower service model varies depends on the company's turnover. For recreational parks Xcaret, Xel-Ha and Xplor it was noted that additional service variables regrouped in to the six most significant factors for the visitor, which are: care; information; information technology and communication; care for infants and pets; entertainment; and food.

These factors are essential for the visitor because they are aligned parallel to the substantive services offered by parks, and the degree of involvement generates a higher added value. To continue to ensure the best cost benefit for the customer, the six factors require constant evaluation to measure the different perceptions; identify the most significant gaps, and improve responses, driving innovation on supplementary services to improve experiences, and create new ones; continue to analyze each of the variables directly related to human capital specifically affecting the accreditation of training and competition to improve quality of service; and, create spaces suitable for the care of people with disabilities, infants and pets, as these groups represent a new market segment increasingly frequent these places.

With these six factors, marketing strategies can be developed to help the promotion and creation of value for the visitor and generate significant competitive advantages.

# LIMITATIONS AND RESEARCH DIRECTIONS

Within the limitations of the study is that the vast majority of the surveyed visitors were local, and are is thought to have a different perception than tourists from elsewhere. This exploratory study was directed generally to the three most profitable parks of the Xcaret Experiences group; however, it is believed that further research should be conducted in a form individual to each of the parks. Another limitation is lack of theory about recreational tourism services: so this research provides insight into this largely unexplored field in Quintana Roo.

This study generates a desire for continued research on the perception of the visitor. The next research could focus on visitors who come for the first time to the park, and continue contributing to the generation of recreational studies to help establish the model of the flower of service as applied to recreational services.

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# AUDITOR'S CLIENT ACCEPTANCE AND CONTINUANCE DECISIONS: A RESEARCH NOTE

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### ABSTRACT

This paper investigates the theoretical perspectives used in the extant auditing literature to study client acceptance and continuance decisions (CACD). Firstly, the paper identifies and discusses the single client approach. Secondly, the audit firm portfolio management perspective is introduced and analyzed. Finally, the apparent incommensurability of the two approaches is discussed and the foundation for a general theory of the CACD is presented.

# **JEL:** M42

**KEYWORDS**: Audit engagement, client acceptance and continuance decisions, audit firm portfolio management, auditor-client relationship.

# INTRODUCTION

Client acceptance and continuance decisions (CACD) are critical and complex decisions which have significant economic implications for audit firms, their clients, and individual auditors (Johnstone and Bedard, 2004). For public companies or clients, auditors' CACD may have important consequences, such as stock price rises following client acceptance or retention and stock price declines following auditor resignation (Beneish et al., 2005). On the supply side, CACD are considered by professionals and academics as the most important decisions in audit practice (Gendron, 2001; Johnstone and Bedard, 2003). They are frequent and recurrent decisions, which automatically precede any audit engagement. In addition, CACD is critical to the advancement of the auditor's professional career as well as the composition of the audit firm's portfolio of clients and its profitability. Moreover, CACD represent a critical phase in the audit process (IFAC, 2010). A careful and extensive assessment of the client at the pre-engagement stage contributes to a better planning and performance of the audit engagement, thereby reducing audit costs and errors.

Considering the key role of the CACD stage in the audit process, building a theory of CACD is an important task that would benefit auditing scholars and practitioners as well. It is also a critical step for developing a unified theory of external auditing. In the academic literature, two different perspectives have been used to study the CACD: the single-client and the clients-portfolio perspectives. Under the first perspective, which is by far the dominant approach in the extant literature, the auditor considers only client-specific factors when making a client acceptance decision (CAD) or a client continuance decision (CCD) regardless of the potential impact of his decision outcome on the audit firm clients-portfolio. The second approach, also called the audit firm portfolio management perspective, considers the set of the audit engagements relating the auditor and his clients as a portfolio that the audit firm has to purposefully manage. Under this approach, each audit engagement between the auditor and the client is considered within a broader perspective where the CACD drivers are closely related and contribute actively to the overall performance of the audit firm.

In our view, these two approaches if taken separately provide limited insights on the CACD. This study discussed the apparent incommensurability of the two perspectives to set the foundations for a general theory of the CACD. The remaining of the paper is organized as follows. First, the single-client and the

clients-portfolio perspectives are discussed. Then, the foundation of a general theory of CACD is developed. Finally, a brief conclusion is provided.

#### **EXISTING THEORIES: SINGLE CLIENT APPROACH**

The first approach arises from examining CACD prior papers though not explicitly identified and studied in the extant literature. In fact, most of the previous audit studies examined CACD, also called auditor or audit engagement decisions under this approach, on a single client basis and overlooked any audit firm clients' portfolio dimension. This approach implicitly assumes that the auditor considers only clientspecific factors when assessing the audit engagement risk-reward trade-off, regardless of the potential impact of his ultimate CACD on the audit firm portfolio of clients. For example, before accepting or rejecting a new audit client, the auditor will certainly assess the client's riskiness, on an individual basis. However, the auditor will not consider the potential impact of the acceptance of the client on the overall riskiness of the audit firm clients-portfolio.

The main limitation of the single client perspective lies in the fact that it considers the acceptance decision, the resignation decision, and the retention decision, as totally separate decisions. In point of fact, very few prior studies have addressed more than one decision concurrently (e.g. Beneish et al, 2005, Johnstone and Bedard, 2004). However, the three "apparently" different decisions are closely related. For instance, the retention and the resignation decisions are the sides of the same coin. During the client continuance decision process, the auditor either accepts to audit the client for a subsequent year (retention) or not (resignation). Moreover, the retention decision is generally considered as a "mechanical" replication of the client acceptance decision (Colbert, 1996; Goldwasser, 1988), i.e., the auditor decides to continue the engagement for an additional year whenever the client continues to meet the acceptance criteria. Accordingly, a more comprehensive perspective which can integrate the three auditor engagement decisions in a global decision process relating acceptance, retention, and resignation, would improve our ability to study the similarities, differences, and interactions between the three engagement decisions. This will certainly improve scholars and practitioners comprehension of the most important stage of financial statements auditing.

#### **EXISTING THEORIES: CLIENTS-PORTFOLIO APPROACH**

The second approach, called the "clients' portfolio perspective" or the "audit firm portfolio management perspective", considers the set of the audit engagements relating the auditor and his audit clients as a portfolio that the audit firm purposefully manages. This approach introduced more than twenty years ago by two seminal auditing scholars (Simunic and Stein, 1990) and adopted subsequently by other researchers (e.g. Johnstone and Bedard, 2004, 2005) is still embryonic and consists of transposing the portfolio theory in finance to the audit context. According to Simunic and Stein (1990) "the riskiness of an audit engagement is properly defined and measured within a portfolio context" since the outcome of every client acceptance or continuance decision has an impact on the riskiness of the audit firm clients' portfolio en bloc (Huss and Jacobs, 1991). Similar to portfolio optimization in finance, auditors deal with the selection and management of optimal portfolios of clients. Consequently, each audit engagement needs to be considered within a broader slant, where the CACD (also called audit firm portfolio management decisions under this approach) drivers are closely interrelated and contribute actively to the overall performance of the audit firm.

The AFPM perspective provides an integrative framework in which the acceptance, retention, and resignation decisions are interrelated since each decision affects the composition of the audit portfolio of clients. However, as argued by Jonhstone and Bedard (2004), the unconditional transfer of portfolio theory from finance to auditing is marred with several difficulties. First, the composition of the audit firm portfolio is the result of both the auditor's decision to accept or retain clients and the clients' decisions to

hire the auditor. On the contrary, the composition of the investor's stock portfolio is the result of his unilateral investment decisions. Second, estimating the return and the standard deviation of the market is critical in the financial portfolio theory. However, estimating these parameters for all audit firms' portfolios of clients would not be practically possible. Third, many audit clients, even large ones, are not publicly traded. Finally and most importantly, the maximum loss a stock portfolio holder can experience is limited to his initial investment, whereas, the auditor's loss may be far higher than the original audit investment (e.g., Arthur Andersen failure because of on single client "Enron"). These theoretical issues may explain why this innovative and interesting approach never took off despite the fact that, in practice, auditors are used to think of their clients as a portfolio, especially before the scandals of the beginning of the century (see Bell et al, 2002). This raises the following questions: is the audit firm portfolio management perspective useless and irrelevant? Were practitioners completely wrong when they decided to use this approach for many years?

# FOUNDATIONS FOR A GENERAL THEORY OF CACD

Although the portfolio approach may not be directly applicable in the audit firm context, we believe that it provides an essential complement to the more widely used single client approach. In fact, when dealing with the CACD, both the single client specific factors and the audit firm portfolio attributes should be considered. Obviously, client's characteristics are fundamental for the assessment of the riskiness and the profitability of an audit engagement. At the same time, we think that the characteristics of the audit firm clients-portfolio should not be totally ignored. The single and the portfolio perspectives are complementary and a successful CACD theory should be a mix of both approaches. This raises an important question that has been overlooked by auditing scholars for decades: how the two approaches can be practically integrated in the same framework?

Contrary to portfolio theory in finance, we deem that the portfolio approach cannot be used in external auditing to reduce the riskiness of the audit firm client-portfolio by the mechanism of diversification. More specifically, the impact of a particular client on the audit firm portfolio riskiness and profitability cannot be used as an acceptance/retention criterion, especially in the current audit market characterized by growing litigation risk and where an audit firm may collapse following the failure of one single audit engagement (e.g., the audit engagement of Arthur Andersen with Enron). To be accepted or retained, the client should therefore meet the acceptance/retention criteria on a single basis. If the client is not acceptable using the single based approach, then he should be rejected even if he fits well into the audit firm clients-portfolio, i.e., even if the auditor can reduce the audit costs associated with the engagement and obtain an acceptable risk-reward trade-off for the audit because the client matches the audit firm targeted clientele. Accordingly, the single client perspective should remain the fundamental approach for CACD as it depicts not only the most fundamental and significant decision factors, but also due to a "catastrophic" risk which may arise from a single client.

A common error among practitioners consisted in using the portfolio approach to distinguish between acceptable and not-acceptable clients. This practice has been, undoubtedly, one of the causes of the audit scandals at the beginning of the century and the ensuing dramatic increase of auditor litigation risk. Prior studies documented that accepting highly risky client has been the main reason behind the major auditing scandals (Ethridge et al., 2007). However, auditing literature did not extensively investigate why audit firms did so at the first place. Some scholars argue that audit firms' greed is the source of all the problems (Toffler, 2003). While this argument cannot be completely discarded, it is worthwhile to note that all major audit firms, especially Big N, have been accustomed to use well developed and complex expert systems to assist engagement partners in their CACD (e.g., KRisk by KPMG and FRisk by PricewaterhouseCoopers). In addition, audit quality controls such as peer reviews are well developed in these audit firms which limits perverse effects of greed (Bedard et al., 2008). Surprisingly, some CACD expert systems include audit firm portfolio factors though these systems are used on a single client basis

(Bell et al., 2002). This suggests that besides greed, a myopic decision making process may have contributed to making highly risky clients looking acceptable. How is it possible, then, to integrate the audit firm portfolio approach in a general theory of CACD if the single client perspective has to be the fundamental CACD approach? How can the audit firm portfolio perspective complement the single client approach?

Our argument is as follows. An acceptable client who meets the acceptance/retention criteria on a single basis would indeed be more attractive to the audit firm if he also enhances the profitability of the audit firm portfolio and/or reduces its riskiness. For example, a client who fits audit firm's targeted clientele can increase the overall profitability of the audit firm through reduced audit costs and/or decrease its riskiness through higher quality audits and lower litigation risk (Shu, 2000). Therefore, the portfolio approach can be used to rank acceptable clients based on the impact of their addition to the audit firm portfolio on its overall profitability faced by auditors as they have to deal with audit firms' limited resources and the resulting impossibility to accept all clients interested in hiring the audit firm. To improve auditors' decisions, the CACD making process should therefore benefit from the portfolio approach and involve factors related to the audit firm portfolio besides individual client's factors. A successful theory of CACD needs to integrate the single and the portfolio approaches in a unifying framework where the single perspective identifies the set of acceptable audit clients while the audit firm portfolio approach ranks them.

#### CONCLUSION

This study identifies two "poles apart" approaches for auditor's client acceptance and continuance decisions in the extant auditing literature. Under the single client perspective, the auditor considers client specific factors only during the initial auditing stage, omitting any possible impact of his decision on the audit firm clients-portfolio. The audit firm portfolio approach is an alternative perspective which considers audit firm's clients as a portfolio that the audit firm has to purposefully manage. The two approaches have always been considered as incommensurable. This paper argues that the two perspectives are rather complementary and that a successful CACD theory should be a mix of both approaches. It also shows how they can be integrated in a general CACD theory. Future research needs to revisit the client and audit firm attributes used by auditors during the CACD stage on the light of this new integrative approach. A deeper understanding of the single client and the portfolio perspectives as well as their places, relative importance, and interactions within the auditor's CACD making process is also worth to pursue.

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# SEDNA BOATS: A SEARCH FOR UNRECORDED LIABILITIES AUDIT SIMULATION

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#### ABSTRACT

This teaching case simulates an audit engagement in which students are prompted to perform a procedure of search for unrecorded liabilities. The project aims at helping students understand the purpose of the procedures of search for unrecorded liabilities and identify related management assertions and audit objectives. More specifically, students are asked to describe a procedure of search for unrecorded liabilities and then implement it. This includes the following steps: (1) selecting material items, (2) finding documents they need to test sampled items, (3) identifying potential unrecorded liabilities and ensuring that they are properly recorded, and finally (4) preparing audit documentation summarizing their findings.

# **JEL:** M42

**KEYWORDS**: Unrecorded liabilities, management assertions, audit procedures, audit documentation, audit program, misstatements.

# INTRODUCTION

Rob is a junior auditor in the Montreal office of a Big 4 CPA firm. He has been hired few months ago right after he successfully finished a BBA in Accounting. Today, he is starting a new audit engagement under the supervision of John who is one of the most experienced audit managers in the office. Rob arrived at the client's premises a couple of hours ago where he first met all the other members of the engagement team and also met with the Sedna Boats management's representative. Now, it is time to get started.

# THE CASE

John: "Rob, did you ever heard about "searching for unrecorded liabilities"?"

Rob: "Yes. I remember that we had a brief session on this topic during the training week I have attended after joining the firm, but I never had the opportunity to perform this procedure."

John: "Perfect. So, what do you know about the search for unrecorded liabilities?"

Rob: "A search for unrecorded liabilities aims at verifying that all auditee's liabilities as of the end of the year are properly recorded in the statement of financial position. As external auditors, ensuring that the amounts of liabilities reported by the company are accurate is part of our responsibilities towards financial statements' users. For instance, capital providers need complete information on liabilities to assess company's liquidity and solvency.

Basically, the issue with liabilities is quite simple. According to accrual basis accounting, expenses, along with corresponding liabilities, should be recorded when they are incurred, irrespective of payment date. Since recorded expenses have a direct impact on the net income, it is important to ensure their proper recognition is done. If all incurred expenditures are not recorded in the appropriate accounting period,

then net income will be overstated and the corresponding liabilities will be understated (Albrecht, Stice, Stice, Swain, 2010). In order to test for unrecorded liabilities, one can select a sample of cash disbursements occurring after the end of the accounting period, determine whether or not each sample item relates to a liability pertaining to the year under audit, and finally ensure that the corresponding liability has been properly recorded at the statement of financial position date."

John: "I think that you know the main purpose of a search for unrecorded liabilities. Remember that unrecorded liabilities may be due to inadvertent errors or also intentional manipulation by managers. Identifying unrecorded liabilities is therefore a way to detect a potentially hidden risk of business failure (Harvey and Lusch, 1999)".

John continues: "I have asked Sedna Boats managers to provide us with different documents including invoices, cheques, the subsidiary ledger of accounts payable, and the journal of cash disbursements that occurred during the first month following the end of the accounting period. Using these documents, I want you to perform a search for unrecorded liabilities. In addition to the procedure you described earlier (looking at subsequent disbursements), other procedures could be used, which are: (1) examine significant invoices that pertain to the year under audit but that were processed after the end of the accounting period and not paid as of today. This procedure enables you to verify that all liabilities pertaining to the year under audit have been properly recorded; (2) examine unprocessed invoices and unmatched purchase orders for items that should be accrued in the period under audit to make sure that whenever the goods or services were received on or before the statement of financial position date, the corresponding liabilities have been accurately recorded; (3) review cut-offs of purchases in order to check that liabilities related to the audit period have been recorded in the appropriate period; (4) inquire the client about any significant unrecorded liabilities she might be aware of.

First, I will ask you to identify the most suitable procedure to search for unrecorded liabilities in view of the documents provided by our audit client. Afterwards, I need you to select a sample of transactions, using the appropriate documents, in order to perform your audit procedure. As to the sample, our estimation shows that all transactions exceeding \$20,000 should be reviewed. Generally, every time you observe that the liability is not properly recorded while pertaining to the year under audit, you've got an unrecorded liability case. Nevertheless, I decided to set the tolerable misstatement here at \$12,000. This means that only unrecorded liabilities that exceed this amount should be pointed out and adjusted. Finally, you have to document your work and summarize the findings. I will ask you to fill in a memorandum that I will hand out later. First, fill in the fields on the client's name, your name, the date, the nature of the procedure, the management assertions you will be challenging, the tolerable misstatement, and the objective of the procedure. Then, describe the procedure you performed and indicate your findings and conclusions for each sample item."

John concludes: "I think you are ready to begin the search now. I will provide you everything you need to start your work. Do you have any question or comment?" Rob answers: "I have no questions for now. I think that everything is quite clear to me and I am ready to start right away."

#### **INSTRUCTIONS**

1. Choose the appropriate audit procedure to search for unrecorded liabilities and implement it.

2. As you perform the audit procedure, complete the memorandum requested by the audit manager and summarize all your findings in this document. You are expected to:

> Identify the nature of the procedure and the management assertions tested with this procedure.

Give an opinion on each entry as well as an overall conclusion after you complete the entire procedure (including a proposition of audit adjustment if necessary). Make sure that the conclusion is stated in terms of the objective that you set in your memorandum.

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# THE FINANCIAL IMPACT OF MARKETING AND R&D INTEGRATION: EVIDENCE FROM KOREA

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### ABSTRACT

The marketing/R&D interface and its role in improving various aspects of organizational performance have been extensively studied during past years, since its importance in new product development process as well as in new product development success was emphasized in early 1990. However, most studies have been conducted in well-established industrialized nations, e.g., US, leaving emerging regions unexplored. To provide a guideline to the organizations in transforming countries, and further to generalize the impact of integration between marketing and R&D on the organizational performance, 250 Korean companies have been surveyed on their levels of their cooperation between marketing and R&D, and firm performance. The statistic data analysis has been conducted by utilizing multiple regressions in the IBM SPSS V17. The results confirm that the marketing/R&D interface increases firm performance in terms of customer satisfaction, adaptability, and profitability ( $\beta = 0.56$ , t= 11.11, p< 0.00;  $\beta = 0.54$ , t= 10.58, p< 0.00;  $\beta$ = 0.36, t= 6.31, p< 0.00 in order). In additions, strategic organizational cultures such as customer orientation and technology orientation effectively drive higher collaboration between marketing and R&D linking to affirmative firm level returns. Interestingly, technology orientation has been proven to be the more effective driver than customer orientation on the integration ( $\beta = 0.44$  vs.  $\beta = 0.28$ ; p< 0.00). While marketing/R&D integration has been found to partially mediate both strategic orientations and firm performance, the direct impacts of two orientations on firm performance has been observed. Refer Table 1 and Table 2 for the test results. In conclusion, this study re-confirms the research findings in the studies undertaken in developed countries and provides valuable strategic implications to corporations in transitioning economies regarding how to allocate their limited resources to maximize their impacts on organizational returns.

*Keywords:* Marketing/R&D integration, Customer Orientation, Technology Orientation, Firm Performance, Korea

Relationships	Standard coefficient	Hypothesis testing
H1: Integration of Marketing/R&D $\rightarrow$ Firm Performance	0.53 (9.83)***	Supported
H2: Customer Orientation $\rightarrow$ Integration of Marketing/R&D	0.28 (4.78)***	Supported
H3: Technology Orientation $\rightarrow$ Integration of Marketing/R&D	0.44 (7.74)***	Supported
H4: Customer Orientation $\rightarrow$ Firm Performance	0.33 (5.79)***	Supported
H5: Technology Orientation $\rightarrow$ Firm Performance	0.38 (6.83)***	Supported

Table 1: Results of Hypotheses Testing

For firm performance, the mean value of three dimensions: customer satisfaction, adaptability and profitability is used; \*\*\*p < .01, N = 250.

# Table 2: Mediation Test Results

	Integration of Marketing/R&D		Firm Performance	
Independent Variables	Model 1	Model 2	Model 3	Model 4
Control Variables				
Manufacture/Non-manufacture	0.03 (0.62)	-0.08 (-1.45)	-0.05 (-0.92)	-0.06 (-1.12)
Company Size (ln)	0.04 (0.75)	0.16 (2.81)***	0.11 (2.01)**	0.10 (1.87)*
Company Age (ln)	-0.04 (-0.81)	-0.04 (-0.76)	0.05 (-0.95)	0.05 (-0.95)
Main Effects				
Customer Orientation	0.28 (4.78)***		0.33 (5.79)***	0.25 (4.48)***
Technology Orientation	0.44 (7.74)***		0.38 (6.83)***	0.27 (4.44)***
Mediating Effect				
Integration of Marketing/R&D		0.53 (9.83)***		0.26 (4.28)***
R2 (Adj. R2)	.39 (.38)	.32 (.31)	.40 (.38)	.44 (.43)
$\Delta R2$				.04 (.05)
F	30.84	29.30	31.69	32.23

Company size and age were transformed by taking logarithm; \*\*\*p < .01, \*\*p < .05, \*p < .10; N = 250.

# THE OPTIMAL DIVIDEND YIELD RANGE: THE CASE OF EUROPE AND SPAIN DURING THE PERIOD 2000-2009

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#### RESUMEN

Using monthly data during the period 2000-2009 for 163 European and Spanish companies, we show a clear, non-linear relationship between dividend yields and total stock returns earned by stockholders. This relationship is an inverted, U-shaped relationship in the sense that stocks within a specific range of Dividend Yield (DY) have superior returns and are the only ones with positive average returns throughout our sample period. We also find that stocks within a portfolio with superior and positive returns are the ones that show lower risk when risk is measured by the portfolio's average standard deviation. The relationship between DY and risk exhibit a U shape. Our results contradict the Miller and Modigliani (1961) irrelevance theorem and reveal the existence of an optimal dividend yield policy. These relationships persist when we relate current DYs with returns and risks one month, three months, six months, and one year ahead, especially in the case of Spanish companies. Our ten-year sample includes a period with financial market downturns and recoveries, which helps reduces biased results related to bull or bear markets. Additionally, we found that the nonlinear relationship between DY and risk, and DY and returns, cannot be explained by different market capitalizations.

**JEL:** G11, G15.

KEYWORDS: Dividend Policy, Portfolio Management, Trading Strategies

# INTRODUCTION AND RELATED LITERATURE

This paper addresses a fundamental question in corporate finance: is the value of shareholders' wealth affected by a firm's dividend policy? Since Miller and Modigliani (1961, herein MM) and Black (1976) published their seminal papers, dividends have been a very fruitful field of study. The irrelevance theorem of MM indicates that all dividend policies are equally optimal and that investment policy alone determines stockholder wealth in frictionless markets.

Following Allen and Michaely (2003), we echo that understanding dividend policy is important not only because of the amount of money involved and the repeated nature of the decision but also because payout policy is closely related to and interacts with most firms' financial and investment decisions.

This paper's results allow us to reject the hypothesis of independence between dividend yield (DY) and the total return earned by stockholders. A nonlinear relationship exists between both variables, which shows that the dividend payout policy is at an optimal level (proxied in this work by the DY). These empirical results line up with the hypothesis that payout policy influences investment decisions, which supports the works by DeAngelo and DeAngelo (2006 and 2007, herein DD). DD (2006) refute the MM proposition and show that it affects dividend policy matters and stockholders' wealth, which are not only determined by investment policy.

In addition to the relationship between DY and returns, we test the hypothesis of independence between DY and risk and find evidence contrary to it.

Our work shows a clear, short-term relationship between DY and stock returns. For two sample sets--the 50 European blue-chip companies and a group of the 113 most liquid Spanish companies listed--we find an inverted, U-shaped, contemporaneous relationship between return and DY. In the case of the Spanish companies, this relationship persists when relating current DY with returns one month, three months, six months and one year ahead.

To our knowledge, this paper is the first to document the existence of an optimal level of dividend yields with a ten-year sample for two different markets and to find that the return achieved at this optimal level is inversely related to the portfolios' risk profile when measured by sigma.

The European (García-Borbolla and Larran (2005) study the factors affecting firms that pay dividends and conclude, excluding Spain and the UK, that where company size has a positive influence upon dividend distribution volume, dividends are used more strategically to reduce information asymmetries about future company earnings, rather than to reduce agency costs). and Spanish markets are particularly useful for studying DY and dividend strategies because little research on either dividend or investors' behavior in response to the release of new information contained in the dividends exists (González Rodríguez (1995) analyzes dividend announcements' effects on the stock market value of firms trading at Madrid's Stock Exchange and observes that the price reaction is larger for stocks with high dividend yields. Fonseca (1997) shows a positive relationship between dividend taxation and the share price response of announcements of changes in dividends, and Espitia and Ruiz (1996) point out that, in the Spanish Equity Market, ex-dividend prices, on average, fall less than the dividend amount). Existing studies in the Spanish and European stock market focus mainly on the dividend policy rather than on dividends as an investment strategy tool.Additionally, other published papers focus mainly on the relationship between DY and profitability, without analyzing the relationship among other variables we analyze in our work (e.g., risk).

Our results for these two samples are likely transferable to other countries, particularly those where firms pay regular dividends; these same hypotheses can be tested and this model can serve as an important reference when setting out portfolios based upon DY.

# METHODOLOGY

We analyze two companies' samples from the European and Spanish markets. The study covers ten years, from January 2000 until December 2009. This ten-year sample includes a period with financial market downturns (i.e., 2000, 2001, 2002, 2008) and recoveries (i.e., 2003, 2004, 2005, 2006), and this fact helps to reduce biases in the results related to bull or bear markets. During this time period, we calculate monthly company dividend yields (DY), returns, total risk (standard deviation of returns, or sigma) and capitalization.

The monthly stock returns  $(r_t)$  studied in our sample reveal these data's non-normal behavior. We reject normality for the European and Spanish return data. We have also estimated a risk measure for every company  $(\sigma_t)$  at each month's end. This measure reflects the company's total risk during month t, and it has been calculated as the standard deviation of the company's daily returns during the previous three months.  $DY_t$ , at the end of month t, have been calculated using the sum of dividends paid during the previous twelve months (t, t-1,...., t-11) and dividing this amount by the current month end adjusted closing price  $(p_t)$ .

Using DY as a proxy for the payout policy, we state our first hypothesis:

H<sub>1</sub>: There is independence between  $r_t$  and  $D_t/P_t$ , and the payout policy does not affect investors' wealth.

We can also say that if  $r_t$  is independent of the dividend policy, then the risk level borne by the stockholder, measured as the returns' standard deviation ( $\sigma_t$ ), will also be independent of the payout policy and will only depend on the investment policy. We state our second hypothesis:

H<sub>2</sub>: There is independence between the risk,  $\sigma_t$  and  $D_t/P_t$ , and the payout policy does not affect investors' risk.

To test these hypotheses, we construct a portfolio series ranked according to DY and evaluate whether enough statistical evidence exists to support the independence hypotheses. We rank our monthly observations according to DY. After sorting all assets according to DY, we eliminate the assets with DY over ten percent; with the remaining assets, six portfolios are created. Portfolio #1 is created from the assets with DY equal to 0, portfolio #2 is created from the assets with DYs between (0-2%], portfolio #3 is created from the assets with DYs between (2%-4%], portfolio #4 is created from the assets with DYs between (4%-6%], portfolio #5 is created from the assets with DYs between (6%-8%] and portfolio #6 is created from the assets with DYs between (8%-10%]. Choosing these six portfolios represents a balance between the tractability and clarity of exposition reasons and the need to identify groups with enough difference (according to DY) among them.

Every month for each portfolio, we calculated the following variables: average return, average volatility and average capitalization. We completed the same process for both European and Spanish markets. We collected a total of  $720 (120 \times 6)$  portfolio observations for each market.

The relationship between the  $DY_t$  of a given portfolio and its return can be viewed as a short-term predictive relationship because, for each month t, the  $DY_t$  is calculated with data coming from the previous twelve months (t, t-1, t-2, ..., t-11), and the total return is calculated with the current end-month t data. We will demonstrate there is a nonlinear relationship between DY and returns and a nonlinear relationship between DY and risk; we test statistical and economic significance of these relationships in the next section.

# **EMPIRICAL RESULTS**

#### European Stock Market

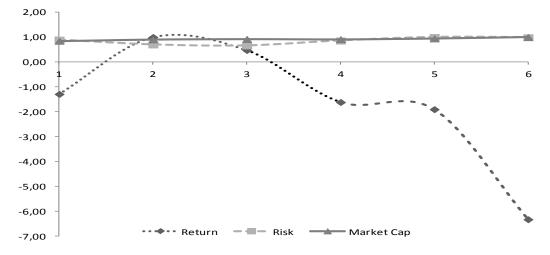
Our results show that the relationship between  $DY_t$  and  $r_t$  is nonlinear. It follows an inverted U-shape figure.

Finally, to further assess the relationship between DY and returns, DY and sigma, and DY and capitalization, we construct three contingency tables. We find we can reject the hypothesis of independence in two cases (returns and sigma), but DY is independent of market capitalization.

#### Spanish Stock Market

To verify the robustness of the previous results, we performed a same study using a sample of 113 Spanish firms. We first check the mean and variance equality for the six portfolios comprised by Spanish firms (see Table 2).

Figure 1: European portfolios average return, risk and capitalization. Data has been standardized for ease of comparability.



In figure 1, we can graphically appreciate the relationships between DY and returns, DY and risk and DY and capitalization. We do not observe any difference in the portfolios according to market capitalization. It seems that the relationship between DYt and  $\sigma$ t follows a U-shaped relationship, meaning that the portfolios with less risk are in the middle range of DYs and are those with higher returns. To test the statistical significance of these relationships, we examine the means equality for the six portfolios.

#### Table 1: European portfolios`test

	Portfolios' Returns		Portfolios' Sigmas		Portfolios' Cap	
	Statistic	P-value	Statistic	P-value	Statistic	P-value
Test for the equality of group variances						
Levene's test	26.715	0.000	16.686	0.000	18.165	0.000
Brown Forsythe test	6.622	0.000	5.236	0.000	12.735	0.000
Test for the equality of group means						
Welch's t test	7.405	0.000	5.315	0.000	17.102	0.000

Before we compare means, we calculate the Levene's test and the Brown-Forsythe test. Both tests are used to test if the six portfolios have equal variances. Table 1 shows the estimation results and the corresponding p-values. With these results, we can reject the null hypothesis of homogeneity of variances in the case of portfolios' return and portfolios' sigma, but not in the capitalization case. In the capitalization case, we can accept means equality for the six portfolios, indicating that there is statistical independence between DY and capitalization.

#### Table 2: Spanish portfolios`test.

	Portfolios' Returns		Portfolios' Sigmas		Portfolios' Cap	
	Statistic	P-value	Statistic	P-value	Statistic	P-value
Test for the equality of group variances						
Levene's test	33.453	0.000	56.837	0.000	171.600	0.000
Brown Forsythe test	11.94	0.000	123.448	0.000	53.618	0.000
Test for the equality of						
group means						
Welch's t test	13.725	0.000	102.808	0.000	74.464	0.000

We first calculate the Levene's test and the Brown-Forsythe test to study if the six portfolios have equal variances. Table 2 shows the estimation results and the corresponding p-values. With the results of table 2, we can reject in every case the null hypothesis of homogeneity of variances and of means equality.

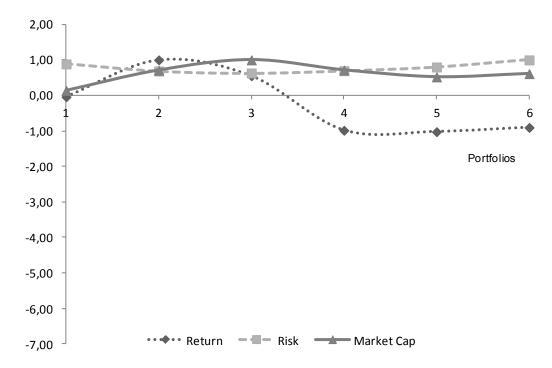


Figure 2: Spanish portfolios average return, risk and capitalization. Data has been standardized for ease of comparability.

Again, the inverted U-shaped relationship between DY and total returns emerges, and again the U-shaped relationship between DY and risk shows up. In this sample, differences can be observed in relation to market cap. Portfolios with stocks not paying DYs are the ones with lower market caps.

The contingency tables lead us to reject the hypotheses of independence between DY and returns (H1), DY and sigma (H2), and DY and market cap. These results indicate that DYs provide information about the risk-return characteristics of stocks and that DYs give significant information.

#### A closer look at the optimal dividend yield range.

Here, we examine more closely the optimal interval that emerged from our previous analysis. Investors should pick stocks with DYs in the (0%-4%) range and should maintain their investments away from stocks with other DYs. However, this is a wide range, so we should divide it into four portfolios with a variation of 1% DY and test whether we can narrow our selection.

	European sample	Port #1 DY(0%-1%]	Port #2 DY(1%-2%]	Port #3 DY(2%-3%]	Port #4 DY(3%-4%]
Ν		420	1162	1373	1133
Average Return		0,0053	0,0058	0,0032	0,0027
Ν		420	1155	1350	1088
Average Standard D	ev	0,3772	0,2981	0,2842	0,3200
	Spanish Sample				
Ν		1.026	2.135	2.136	1.534
Average Return		0,0161	0,0113	0,0085	0,0051
Ν		1.022	2.138	2.139	1.518
Average Standard D	ev	0,3166	0,2977	0,2797	0,2861

Table 3: Average Return and Standard Deviation for the European and Spanish Samples considering the (0%-4%] DY range.

We can observe that the four portfolios have positive average returns and also that they maintain a low risk profile, always lower than the other portfolios' risk profiles. Portfolios composed by stocks in the (2%-3%] DY range are, for both samples, the ones with lower risk, while the range with higher returns have DYs between (0%-2%], again for both markets.

The independence tests show that, although the results for the four portfolios are very similar, we can reject the hypothesis of equality of group variances and group means. In the case of the risk study, we can reject the hypothesis of independence between DY and risk, for both samples, so the results for the (2%-3%] interval are very robust.

Nevertheless, in the returns study, we can accept the hypothesis of independence between DY and returns, so the average returns are very similar across the (0%-4%) interval.

# CONCLUDING REMARKS

Similar to Baker and Wurgler (2004), we conclude that dividends matter to shareholders. In this way, our results support the point in DD (2006) that payout policy is important and contradict the argument in MM that only investment policy matters.

In this work, we test two hypotheses: the hypothesis of independence between DY and the total return earned by stockholders (H1), and the hypothesis of independence between DY and the risk borne by stockholders (H2). Our findings show that DY and total stock returns are not independent (H1) and that this relationship is, in the short term, a non-linear, inverted-U relationship. Independent risk and DY (H2) are also not independent and exhibit a U-shaped relationship.

For two samples--the 50 companies in the Eurostoxx50 and 113 Spanish companies-- over the past 10 years, this work shows an inverted, U-shaped relationship between DY and returns, past 10 years this work shows an inverted, U-shaped relationship between DY and returns, revealing an optimal DY level when considering shareholders' total returns. We find an optimal DY range in the sense that portfolios constructed with stocks paying dividends in these levels are the ones attaining superior returns. For both samples, this DY interval is (0%-4%]. These portfolios also do not have high risk, so return is not the compensation for risk; to the contrary, they exhibit the lowest risk levels. The results are statistically significant and they are not specific to a declining or an advancing market because the sample period covers both.

We find that the U-shaped, contemporaneous relationship between DY and risk is maintained when relating the current DY with the risk one month, three months, six months and one year ahead, indicating the short-term, predictive value of DY. The short-term, predictive power of DY in relation to returns is confirmed in the Spanish case for up to one year; however, in the European case, the predictive power is limited to one month ahead.

These results contradict the semi-strong form of the Efficient Market Hypothesis and are more in line with alternative explanations such as the behavioral finance findings of Hodrick (1992), Jiang and Lee (2007) and Nieto (2010).

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# **SPANISH PROCEEDINGS**

# VARIABLES QUE INFLUIRÍAN EN LA GESTIÓN ORIENTADA AL VALOR DEL CLIENTE Y EL DESEMPEÑO ORGANIZACIONAL

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#### RESUMEN

Hoy es fundamental una gestión orientada al mercado para que los negocios triunfen. Esto porque los negocios están inmerso en un entorno globalizado y altamente competitivo. Muchas empresas monitorean el mercado (clientes, prospectos, competencia, proveedores, etc.) local y globalmente, para obtener y analizar información esencial y, generar conocimiento para responder proactivamente con soluciones viables y creativas. El objetivo es rentabilizar y fidelizar las relaciones con sus grupos de interés, especialmente, con sus clientes. Esta investigación contribuye con el diseño de un modelo conformado de una serie de constructos confiables y validados en estudios previos (Orientación al Valor del Cliente (OVC), Cultura Organizacional Orientada al Mercado (COOM), Valor de Marca (VM) y Ética Empresarial (EE)) para explicar cómo podrían influir sobre el desempeño organizacional (DO). Las hipótesis han sido testeadas con las respuestas de 327 ejecutivos de mandos medio y alto en distintos sectores empresariales en Chile. Los análisis exploratorios validan los constructos y los análisis confirmatorios señalan que las variables y sub-modelos son significativos. El estudio reveló que estas variables influirían en el desempeño organizacional.

**PALABRAS CLAVE:** Orientación al mercado, orientación al valor del cliente, valor de marca, ética empresarial y desempeño organizacional.

# VARIABLES THAT WOULD INFLUENCE ON CUSTOMER ORIENTED MANAGEMENT AND ORGANIZATIONAL PERFORMANCE

# ABSTRACT

Today it is fundamental to have Market-oriented management in order for businesses to succeed. This is because businesses are immersed in a globalized and highly competitive environment. Many companies monitor the market (customers, prospects, competitors, suppliers, etc) locally and globally, to obtain and analyze essential information and, generate knowledge to proactively respond with viable and creative solutions. The objective is to capitalize and retain relationships with its interest groups, especially, with their customers. This research contributes with the design of a model consisting of a series of reliable constructs and validated in previous studies (Customer Value Orientation (CVO), Market-Oriented Organizational Culture (MOOC) Brand Value (BV) and Business Ethics (BE) to explain how they would influence on organizational performance (OP). The hypotheses were tested with the responses of 327 executives of medium and high positions in various business sectors in Chile. The exploratory analyzes validate the constructs and the confirmatory analyzes indicate that the variables and sub-models are significant. The study revealed that these variables would influence organizational performance.

**KEYWORDS:** Market orientation, customer value orientation, brand equity, business ethics and organizational performance.

**JEL**: M30

## INTRODUCCIÓN

Estudios avalan que la orientación al mercado (OM) y al valor del cliente (OVC) ayuda a las empresas a alcanzar un crecimiento de sus ventas sustentable en el tiempo (Macintosh, 2007; Jaramillo y Grisaffe, 2009). Esto puede atribuirse a que estas empresas establecen políticas y prácticas que permitan descubrir las necesidades y anticiparse a los requerimientos de sus clientes, y además, los asesoran en las decisiones de compra para que perciban mayor valor en el intercambio. El valor (definido como "*la evaluación global del consumidor sobre la utilidad de un producto, basado en las percepciones de lo que se ha recibido y lo que se ha dado*" (Zeithaml, et al., 1988)) es un antecedente importante para la satisfacción, la repetición de las compras, y las referencias positivas del boca a oído (Palmatier et al., 2007).

Asimismo, los clientes perciben mayor valor cuando los beneficios recibos por el intercambio exceden su costo. Por ejemplo una mejor percepción de la relación calidad-precio ayuda a que los clientes permanezcan leales. Por consiguiente, las empresas deberían dirigir sus esfuerzos de marketing y ventas a incrementar la percepción de valor de sus productos, servicios y marca, puesto que es crucial para la sobrevivencia y crecimiento de sus negocios. Una experiencia positiva, a lo largo de la relación clienteempresa, ayuda a aumentar el valor del tiempo de vida de los clientes (Customer Lifetime Value, CLV) (Kumar, Venkatesan y Reinartz, 2008). Acorde a Gupta y Lehman (2003) el CLV es "el valor presente de todos los futuros beneficios generados desde los clientes", y por tanto, esta métrica permite identificar a los clientes rentables y distribuir los recursos acorde al valor que dichos clientes aportan al negocio (Kumar et al., 2006). Por ende el CLV es una herramienta útil para los gerentes de marketing y ventas, quienes se ven obligados a demostrar que sus acciones aumentan la tasa de retención de clientes rentables, los flujos de ingresos generados desde los mismos, y que esa rentabilidad será sostenible en el largo plazo. Existen estudios que señalan que una mejor comprensión del cliente provoca cambios positivos en la gestión del portfolio (Niraj et al., 2001; Reinartz et al., 2005) y en los resultados de ventas (Jaramillo y Grisaffe, 2009). Y para detectar nuevas oportunidades de mercado es fundamental el establecimiento de relaciones de cooperación con diferentes agentes clave del entorno (Deeds y Rothaermel, 2003), es decir, un enfoque de gestión con visión de equipo que busca co-generar valor entre todos los grupos de interés o stakeholders.

El propósito de esta investigación es identificar en primer lugar cómo la experiencia de la fuerza de ventas, el nivel de capacitación y la satisfacción laboral con algunos de sus antecedentes tales como: involucramiento en el trabajo, ambigüedad de rol y políticas de incentivos podrían influir en el grado de orientación al valor del cliente por parte de los vendedores. En segundo lugar identificar cómo estas variables: orientación al valor del cliente por parte de la fuerza de venta, cultura organizacional orientada al mercado, valor de la marca y ética empresarial influirían en el desempeño organizacional. Este estudio contribuye con la propuesta de un modelo constituido por una serie de constructos fiables y provee evidencia empírica, desde una investigación aplicada a 327 ejecutivos de jefatura media-alta y alta de distintas empresas en Chile que gestionan sus negocios a escala global. Mayoritariamente, las empresas pertenecen al sector servicios, el cual tiene un alto impacto en el desarrollo económico y social de los países.

### **REVISIÓN DE LA LITERATURA E HIPÓTESIS**

Williams y Wiener (1990) señalan que cualquier fuerza que impulse al vendedor a dar énfasis en las ganancias de corto plazo influirá de forma negativa en las ventas de largo plazo como resultado del bajo nivel de orientación al cliente. Por tanto para incrementar las ventas es fundamental contar con un equipo que acompañe al cliente, lo asesore, escuche sus inquietudes, formule soluciones y busque alternativas para obtener beneficios (Hernández, 2009). En definitiva, obtener ingresos de ventas que impacten los resultados organizacionales es factible si los esfuerzos apuntan a establecer relaciones rentables y fieles con los clientes.

Acorde al estudio cuantitativo de Storbacka, Polsa y Sääksjärvi (2011) la necesidad de contribuir con un modelo de ventas que incorpore la selección de los segmentos apropiados, definición de procesos, roles de ventas, y prácticas relacionadas con la gestión comercial es crucial como herramienta para mantener relaciones de largo plazo, crear valor y mejorar los rendimientos. El modelo propuesto en esta investigación (Ver figura 1) destaca el rol fundamental del equipo comercial y de la cultura organizacional para gestionar las relaciones con clientes en función del valor y la creación de un buen servicio, así como el valor de la marca y el nivel ético empresarial, que en su conjunto llevarían a un mejor desempeño organizacional. De las relaciones propuestas en el modelo se derivan las hipótesis del estudio:

H1: El grado de Orientación al Valor del Cliente por parte de la Fuerza de Ventas (OVCFV) influye significativamente en los Desempeño Organizacional (DO). De acuerdo a la evidencia teórica y práctica de la literatura el grado de OVC por parte del equipo comercial dependería de: a) Satisfacción laboral favorable, comprendida como "una función de la relación percibida entre lo que uno quiere de un trabajo y lo que se percibe es ofrecido" (Stanton, Buskirk y Spiro, 1997) y por tanto, involucra todas las características propias del trabajo y su ambiente, el cual los vendedores pueden encontrar gratificante y satisfactorio. En la medida que el grado de satisfacción sea mayor, el compromiso con la organización y con el cliente será mayor (Ugboro y Obeng, 2004), b) Nivel de Capacitación, existe evidencia empírica que demuestra que es un factor relevante y que influye en el grado de orientación al valor del cliente (Harris, Mowen y Brown, 2005) y c) Experiencia de la Fuerza de Ventas, ya que la mayor experiencia en ventas, aumentaría el grado de OVC (Frank y Park, 2006). De esta manera se deduce la siguiente hipótesis H1.1 con sus respectivas sub-hipótesis H1.1a, H1.1b, H1.1c.

H1.1: El nivel de Satisfacción Laboral (SL) influye significativamente en el grado de Orientación al Valor del Cliente por parte de la Fuerza de Ventas (OVCFV) El grado de SL podría depender a su vez del involucramiento o grado en que los individuos se identifican psicológicamente con su trabajo (Darden, Mckee y Hampton, 1993). Rabinowitz y Hall (1977) proponen un modelo donde el involucramiento en el trabajo se compone de un enfoque disposicional (actitud del empleado hacia su trabajo), un enfoque situacional (entorno laboral) y un enfoque que es el resultado de la interacción disposicional y situacional (efecto en el empleo). Para esta investigación el énfasis en el involucramiento en el trabajo (IT) está puesto en la disposición que el empleado posea, como un factor determinante en la calidad de servicio entregado al cliente y la buena gestión de ventas. Basado en diferentes estudios se puede observar la relación significativa entre el involucramiento que tenga una persona con su trabajo y el esfuerzo para alcanzar sus objetivos laborales y desafíos de la compañía (Brown, 1998), el ausentismo (Wegge, Schmidt, Parkes y Van Dick, 2007), el grado de aburrimiento, participación y satisfacción laboral (Behruz, Ghader y Hasan, 2011) y la orientación al valor del cliente que posea la organización (Durson y Kilic, 2011). La evidencia presentada sobre las relaciones que tiene el involucramiento laboral, permiten formular la siguiente hipótesis: H1.1.a: El Involucramiento en el Trabajo (IT) influye significativamente en el nivel de Satisfacción Laboral (SL) de la fuerza de ventas.

Asimismo, poner atención a la Ambigüedad (Conflicto) de Rol (ACR) es fundamental, ya que comprende todos los roles individuales o múltiples al que se enfrentan los individuos, y que no son claramente

comunicados en términos de conductas (actividades, tareas o prioridades) y niveles de rendimiento deseados (cómo se juzga el desempeño) (Kahn, Wolfe, Quinn, Snoek y Rosenthal, 1964). Según Breaugh y Colihan (1994) la ACR posee tres aspectos clave: los métodos de trabajo, la programación y los criterios de desempeño que afectan a la satisfacción laboral. En este sentido, las causas de la percepción de ACR provienen de diferentes orígenes y por ende, las formas de superarlo también son distintas (Keller, 1975). Así lo demuestran un sinnúmero de investigaciones que relacionan la ACR con la satisfacción (Cooke y Rouseau, 1984), participación, rendimiento, tensión e intenciones de abandono laboral (Singh, 1998), esfuerzo del vendedor (Brown y Peterson, 1994), como componente del stress del cargo y que afecta a la satisfacción laboral (Usahawanitchakit, 2008) e influyendo de manera significativa y directa sobre la orientación al cliente con negativas consecuencias en el desempeño de la organización (Durson y Kilic, 2011). Como consecuencia de estos estudios previos se formula la siguiente hipótesis H1.1.b: La *Ambigüedad (Conflicto) de Rol (ACR)*, influye significativamente en el nivel de *Satisfacción Laboral (SL) de la fuerza de ventas*.

La evidencia empírica apoya la importancia de la existencia de Políticas de Incentivos (PI) en las organizaciones en cualquiera de sus formas o manifestaciones. Las formas más frecuentes de incentivo son: comisiones, bonificaciones, beneficios y los incentivos no monetarios (Viejo, 2001). Milkovich y Newman (1996) señalan que la retribución de los empleados juega un papel fundamental en la relación empresa-empleado, pudiendo ser la fuente de buenos resultados por parte de la fuerza de venta. Sin embargo, el efecto en la rentabilidad se obtiene solo cuando la política de retribuciones es constante y a largo plazo (Carlson, Upton y Reaman, 2006). La literatura muestra un sinfín de estudios que relacionan las PI con el desempeño (King-Kauanui y Ashley-Cotleur, 2006), con una baja rotación de personal y un aumento en la productividad de ventas (Huselid, 1995), con mejores actitudes y comportamientos de los empleados (Milkovich v Newman, 1996), con el cambio positivo de comportamiento de los vendedores aun en momentos críticos de las empresas (Murphy, 2004). Y que las PI deben combinarse entre incentivos monetarios y no monetarios para afectar la motivación intrínseca (King-Kauanui y Ashley-Cotleur, 2006; Carlson, Upton y Reaman, 2006), que representan a veces una inversión más grande que los montos destinados a publicidad (Zoltners, Lorimer y Prabhakant, 2006) y generalmente, son mayores en aquellos agentes adversos al riesgo (Lo, Ghosh y LaFontaine, 2011). Por consiguiente, la PI se convierte en un factor clave en la gestión de venta, dado que es el output que recibe el vendedor por su desempeño y por ende, afecta su productividad. Así se plantea la siguiente hipótesis H1.1.c: La Política de Incentivos (PI), influye significativamente en el nivel de Satisfacción Laboral (SL) percibida por la fuerza de ventas.

La segunda variable que influiría en la OVCFV es la Experiencia de la Fuerza de Ventas, referida como la trayectoria que el individuo tiene realizando tareas en el área de gestión de ventas. Investigaciones de Venakatachalam y Reddy (1996) indican que la antigüedad o permanencia en un empleo no tiene efecto sobre la Satisfacción Laboral, pero demuestran un impacto significativo sobre la participación y disposición que se tiene en el trabajo. Skirbekk (2003) señala que el impacto de la Experiencia Laboral es directo sobre el potencial de productividad. Así surge la siguiente hipótesis de la investigación H1.2: La *Experiencia de la Fuerza de Ventas (EFV)* influye significativamente en el grado de *Orientación al Valor del Cliente por parte de la Fuerza de Ventas (OVCFV)*.

Como tercera variable influyente en el grado de OVCFV está el nivel de capacitación, ya que estudios realizados en diferentes partes del mundo como: Asia (Boselie, Hesselink, Paauwe y Wiele, 2001); Estados Unidos, Europa (Hoque, 1999) y África (Ghebregiorgis y Karsten 2007) demuestran el impacto positivo de aquellas empresas que incorporan la capacitación como parte de las políticas de la compañía versus otras que no. Longenecker (2010) y Martin (2010) aseguran que un buen nivel de capacitación permite motivar a los empleados para que aumenten su productividad en el trabajo. Basada en la evidencia presentada, surge la siguiente hipótesis de la investigación H1.3: El *Nivel de Capacitación (NC)* 

influye significativamente en el grado de Orientación al Valor del Cliente por parte de la Fuerza de Ventas (OVCFV).

El siguiente constructo es la Cultura Organizacional Orientada al Mercado (COOM) comprendida como un conjunto de valores y actitudes compartidos en toda la organización, a partir de los cuales se trata de estimular la creación de un valor superior para los clientes (Day, 1994). La importancia de la inserción de esta variable en el modelo es entregada por diferentes autores que indican beneficios como: preferencia del cliente y fuerte lealtad a la marca (Reichheld y Sasser, 1990); beneficios de largo plazo (Narver y Slater, 1995); capacidad de creación de un valor superior para el cliente que aumenta la preferencia, conseguir niveles deseados de crecimiento y participación de mercado (Homburg y Pflesser, 2000), generación de inteligencia de mercado (Kohli y Jaworski, 1990), una gestión basada en relaciones estables y duraderas con los agentes con los que interactúa y por lo tanto, representa el recurso más importante para obtener una ventaja competitiva sostenible (Kumar, Subramanian y Yauger, 1998). Acorde a Kumar, Jones, Venkatesan y Leone (2011) el impacto de la COOM sobre el DO (ventas, rentabilidad) dependerá del grado de orientación al cliente, competencia y coordinación interfuncional (Narver y Slater, 1995), del momento de la adopción de esta filosofía de gestión orientada al mercado (adopción temprana, intermedia o tardía) y de los factores del ambiente (intensidad de la competencia, turbulencia tecnológica, tipo de industria y factores de la compañía). De estos fundamentos teóricos se deriva la siguiente hipótesis H2 y sub-hipótesis H2a, H2b, y H2c del estudio: H2: La Cultura Organizacional Orientada al Mercado (COOM) que posea la empresa influye significativamente en el Desempeño Organizacional (DO). H2.a: A mayor nivel de Orientación a la Competencia (OC) que posea la empresa, mayor será el nivel de Cultura Organizacional orientada al Mercado (COOM). H2.b: A mayor nivel de Coordinación Interfuncional (CI) que posea la empresa, mayor será el nivel de Cultura Organizacional orientada al Mercado (COOM). H2.c: A mayor nivel de Orientación al Valor del Cliente (OVC) que posea la compañía, mayor será el nivel de Cultura Organizacional orientada al Mercado (COOM).

Relacionado al Valor de Marca (VM), definida como "el conjunto de asociaciones y comportamientos de los consumidores, miembros del canal y empresas relacionadas que permiten a la marca ganar mayor volumen y mayores márgenes a los que obtendría sin el nombre, otorgándole una fuerte, sostenible y diferenciada ventaja sobre sus competidores" (Marketing Science Institute, 2000), su importancia yace en que las marcas pueden funcionar como indicador de atributos de búsqueda, de uso y de calidad, y como propiciador de lealtad (Nadelsticher, 1997). Según Olavarrieta (2002) para ser valoradas las marcas es crucial que despierten en los clientes el deseo de tenerlas y cuando hacen menos posible a los consumidores probar alternativas; éstas generan un sentido de lealtad. Además, agrega que una predisposición psicológica positiva hacia la marca deberá trasladarse en una compra reiterada del producto o servicio que ofrece la parte vendedora. Asimismo, Escobar (2000) señala que la marca informa a los compradores que existe un respaldo, un responsable por la reputación de ésta y por el cumplimiento de las promesas que hace, a quien puede consultar ante dudas respecto al desempeño del producto o servicio. Esto permite reducir la preocupación por las consecuencias de la decisión de comprar y la incertidumbre que tendrá al usar un producto (disminución de percepción de riesgo). Un estudio empírico realizado por Fuentes, Luque, Montoro y Cañadas (2004) muestra que existe una relación causal positiva y significativa entre el valor de las marcas y la lealtad de los consumidores, por lo que las empresas pueden realizar actividades que potencien su valor y generen una comunicación efectiva bocaoído de los consumidores leales. De lo anterior se deriva la siguiente hipótesis del estudio H3: El Valor de la Marca (VM) que posee la empresa, impacta significativamente en el Desempeño Organizacional (DO).

El último constructo propuesto en el modelo es Ética Empresarial (EE) comprendida como "una norma por la cual todos los empleados de una empresa pueden saber lo que se espera de ellos y que todos sus miembros tomen decisiones a partir de un conjunto de valores compartidos" (Sullivan, 2009). Este concepto va más allá de la existencia de un código ético en la organización, ya que según Chonko y Hunt

(2000) los códigos de ética, por sí solos, no son eficaces en la reducción de comportamientos no éticos. Sin embargo, parece que la existencia de códigos, cuando se combina con otras actividades, pueden tener un impacto sobre la ética de una organización. Estudios muestran que mientras más orientados al cliente están los agentes, serán menos propensos a participar en actividades poco éticas y viceversa (Howe, Douglas y Hardigree, 1994). Valenzuela, Mulki y Jaramillo (2010) indican que los incentivos especiales que implementen las empresas tendrán un impacto positivo en la lealtad de los clientes, solo cuando éstos consideren que la empresa opera con un alto nivel de ética. Asimismo, Vitell y Paolillo (2004) establecen también una positiva relación entre los valores éticos corporativos, la importancia de la ética y responsabilidad social percibida en el logro de las metas organizacionales. En el modelo propuesto se pretende identificar la influencia de las acciones éticas de la empresa y de su equipo comercial en el desempeño organizacional. Para ello es formulada la siguiente hipótesis: H4: El nivel de *Ética Empresarial (EE)* que posea una determinada organización influye significativamente en el *Desempeño Organizacional (DO)*.

#### METODOLOGIA

Para la obtener los datos se aplicó una encuesta auto-administrada de diseño transversal simple durante Noviembre y Diciembre de 2011. El cuestionario fue aplicado a 327 empleados que ocupan cargos de jefatura media-alta y alta en empresas de Chile (principalmente sector servicios: financieros, *retail* y consultorías). Los encuestados son en su mayoría hombres (79%) con un rango de edad entre 25-34 años (34,6%) y 35-44 años (48,9%). EL 98% posee nivel de educación universitaria completa y llevan 5 años o más (50%) en sus cargos. El canal usado para aplicar el cuestionario fue mayoritariamente online (262= 80%) y vía presencial (65= 20%). El procedimiento de muestreo es no probabilístico por juicio. La escala usada es tipo Likert de 7 puntos (1= Totalmente en desacuerdo y 7= Totalmente de acuerdo). Los criterios utilizados para examinar la unidimensionalidad, validez convergente y fiabilidad de los constructos fueron: Kayser-Meyer-Olkin mayor que 0,6, Eigenvalue mayor que 1, el Test de Esfericidad de Bartlett menor que 0,5, cargas factoriales mayores a 0,7, y Alpha de Cronbach mayor que 0,7. Para medir la consistencia de las variables del modelo se usó un análisis factorial confirmatorio (AFC) usando AMOS 19.0.

#### RESULTADOS

A partir de los análisis realizados es posible observar que todas las variables seleccionadas en todos los casos presentan una carga factorial importante (sobre 0,6), lo cual representa una alta correlación de los ítems con su variable latente. Además todos los constructos evidencian una alta fiabilidad y validez con los valores de Alpha de Cronbach y KMO respectivamente (OC: 0,839/0,787, CI: 0,887/0,833, COOM: 0,85/0,838, OVC:0,918/0,906, EE:0,908/0,91, VM:0,942/0,905, NC: 0,88/0,842, PI: 0,817/0,858, EFV: 0,861/0,803, SL: 0,907/0,855, ACR: 0,767/0,89, IT: 0,848/0,786 y DO: 0,733/0,802). Los resultados de los AFC son satisfactorios, ya que el factor de normalización estandarizado de todas las cargas fueron superior a 0,7 y significativa en  $\alpha = 0.01$ . Asimismo los índices de ajuste absoluto, incremental, parsimonia y fiabilidad compuesta son satisfactorios para todos los constructos y sub-modelos usados en el modelo propuesto (GOVC: 0,879/0,726/0,76, SL: 0,863/0,772/0,72, COOM: 0,874/0,752/0,8, VM: 0,914/0,683/0,83, EE: 0,864/0,706/0,73). La variable más explicativa en términos de ajuste absoluto e incremental ha sido el constructo valor de la marca con resultados sobre 0,9 en todos los indicadores. Los resultados obtenidos en el estudio permitieron determinar la asociación de las variables del modelo y corroborar las hipótesis de investigación.

#### CONCLUSIONES

Trabajar a nivel estratégico y táctico para mejorar el nivel de satisfacción laboral, específicamente en las áreas de marketing y ventas se torna fundamental para aumentar el valor de la cartera de clientes. Por

ende, la gerencia debería preocuparse por aspectos fundamentales como eliminar la ambigüedad de rol para que su equipo de venta tenga certeza sobre los resultados a lograr, sus prioridades, ponderaciones, consecuencias que estos provocan sobre ellos, cómo serán evaluados y compensados, etc. Para ello es necesario trabajar en los procedimientos y programación del trabajo, los criterios de desempeño y las políticas de incentivos. Para contar con un sistema de incentivos efectivo es primordial que las organizaciones conozcan sus propias características, cambios relevantes en su entorno, y las preferencias y comportamientos de compra de sus clientes. Las políticas de incentivos son decisivas para favorecer la percepción de satisfacción laboral e influir positivamente en la motivación intrínseca de los empleados, mediante formas monetarias y no monetarias. Del mismo modo, las organizaciones deberían poner mayor énfasis en su gestión a las acciones que faciliten un mayor involucramiento del equipo de ventas y marketing, puesto que son éstos los que podrían influir en los comportamientos de compra y grado de lealtad de los clientes. La idea es generar mayor sentido de pertenencia, motivación, retroalimentación, comunicación, actitud proactiva para facilitar la consecución de los objetivos. Asimismo, la experiencia generada en el equipo comercial no solo es importante para realizar transacciones; sino también para aumentar la recomendación de los clientes (boca-oído o valor de referencia) y el reconocimiento de la empresa o marca. Y bajo este contexto invertir en capacitación que avude a la permanencia de los buenos empleados, al desarrollo de habilidades y competencias que mejoran la comunicación y gestión con los clientes podrían influir positivamente en una mayor productividad. Las personas se forman una impresión de la empresa no solo por sus productos y su infraestructura, la atención del personal es un elemento importante en la percepción que se crean los clientes sobre la empresa o marca. Y en este sentido, los vendedores son la cara visible de la organización, una mala atención puede provocar que un cliente no tenga interés de recompra, hable mal de la empresa, se convierta en un cliente terrorista (boca-oído negativo, desprestigia a la marca) y opte por la competencia.

Del mismo modo, la ética empresarial es otro aspecto que podría generar percepciones favorables o negativas en los clientes. Generalmente, los directores de ventas y los vendedores están expuestos a resolver dilemas éticos. Los primeros se exponen al contratar, fijar cuotas de ventas, valorar al personal y a otras tareas propias de su gestión. Los vendedores, por su parte, asumen la responsabilidad de la generación de ingresos para la empresa, hacen frente a problemas que exigen soluciones únicas y usualmente, su valoración, está sujeta a logros inmediatos, que pueden llevar a soluciones a corto plazo para los clientes, y que no siempre, provocan beneficios mutuos. Por último es fundamental que la organización monitoree sistemáticamente el mercado y a la competencia para obtener información esencial que le permita a través de su análisis extraer conclusiones relevantes sobre sus mercados y clientes. Así la empresa podrá implementar acciones estratégicas proactivas y eficientes, basadas en el conocimiento, para crear propuestas de valor y soluciones superiores. Esto traerá probablemente compras repetidas con el proveedor, desarrollo de clientes, referencias positivas de boca-oído y valor de marca.

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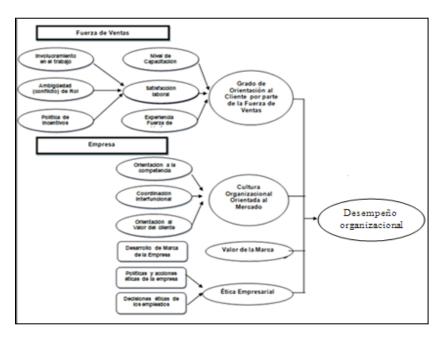
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# Figura 1: Modelo Propuesto



# LIDERAZGO Y CAPITAL SOCIAL, EJES PARA CONSOLIDAR UN CLÚSTER: SC MUEBLES EN JALISCO, MÉXICO

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## RESUMEN

En este trabajo, se presenta evidencias de cómo los líderes cambian de paradigmas y van construyendo el capital social (CS) necesario para la consolidación de clusters": Caso SC-Muebles y Decoración de Jalisco, México; del cambio de una cultura empresarial individualista a la conformación de redes de colaboración y trabajo en equipo. Se hace uso de la investigación participativa, apoyada por la metodología casuística, se lleva a cabo un comparativo de otros clusters del mismo giro localizados en Italia y Alemania.

PALABRAS CLAVE: Liderazgo, capital social, clúster

# LEADERSHIP AND SOCIAL CAPITAL, AXES TO CONSOLIDATE A CLUSTER: SC-FURNITURE IN JALISCO, MÉXICO

#### ABSTRACT

In this paper, we present how leaders change paradigms and they are building the social capital necessary for the consolidation of clusters "Case C-furniture Jalisco", Mexico; The change of corporate culture shaping individualistic to collaborative networks and teamwork. It makes use of participatory research, supported by the case casuist methodology and made a comparison of other clusters in the same line located in Italy and Germany.

#### L: 29

# INTRODUCCIÓN

Este trabajo da cuenta del capital social del sector muebles de Jalisco y de sus líderes, al cambiar un paradigma de organización y trabajo individual al grupal. El papel que han jugado los líderes, así como la fase de consolidación tanto del clúster como de su capital social. Se presenta el resultado y avance de investigación participativa con los principales actores y clúster de muebles del estado de Jalisco. En la revisión de la literatura se plantean las teorías del capital social, tanto individual, como colectivo con el alcance de redes, confianza y la importancia que reviste para el clúster que se tenga un capital social solido. En el apartado de metodología utilizada se presenta los instrumentos metodológicos y el periodo de la investigación así como las variables analizadas. La forma como se hace el diagnóstico del clúster. El papel que han jugado los líderes en el sector en el lapso de cinco años, así como la alta rotación de los mismos y el estatus actual. En los resultados de la investigación, se hace un análisis de las variables de capital social y liderazgo con una visión global, el consenso según los participantes en un grupo focal, así como algunos extractos de las entrevistas semiestructurada aplicada a los líderes sobre el impacto de su liderazgo. Finalmente se presentan las conclusiones, las limitaciones del estudio y las nuevas veredas de investigación surgidas de la investigación y una propuesta de perfil del líder para construir el CS.

# MARCO TEÓRICO

Las variables de estudio son: liderazgo, clúster, capital social, desde el campo científico social, administrativo y económico, el cual, se enfoca en el estudio del CS desarrollado en los clúster sustentados con redes de colaboración, ya que las ciencias sociales estudian el comportamiento, manifestaciones, actividades de las personas y sus estilos de liderazgo. Liderazgo y capital social El liderazgo es la acción que hace el líder, y que puede considerarse como un proceso, un comportamiento o capacidad. Hay diferentes definiciones y alcances, en este caso se toman en cuenta para efectos de la construcción del CS en un clúster, la de (Valenzuela, 2007) *"El liderazgo es la capacidad de desarrollar y comunicar una visión a un grupo de personas que harán que la visión se logre"*; y la de Richards & (Engel, 2005) *"El liderazgo es la articulación de visiones, que encarna los valores y la creación de un entorno en el que las cosas se puede lograr"*. Es lo que se requiere en el clúster.

El líder asume ciertos estilos de liderazgo, el que han adoptado algunos líderes del sector SC Mueblero y Decoración de Jalisco, es el liderazgo distribuido como lo menciona Longo, (2008), por ser el más indicado para generar la innovación tanto en el proceso de producción como en la forma de liderar y conformar el CS. En tanto, el liderazgo transformador es utilizado para generar visiones comunes, cambiar paradigmas de acuerdo a los cuatro pilares en que se sustenta: Desarrollo más humano, libertad personal y una predisposición hacía lo colectivo. Aspira a elevar los valores y necesidades de sus colaboradores para su realización personal y en lo laboral.

El colaborador aspira a alcanzar metas que vayan más allá de las expectativas tradicionales.Romper con el individualismo, dando pie a relaciones de mayor cooperación. El liderazgo y el capital social, se convierten en herramientas para el desarrollo sostenible, como lo proponen (Ribeiro & Vila, 2005) y Prieto & Fabelo, (2009. Longo, (2008) refiere que "el liderazgo se convierte en un asunto de florecimiento de habilidades y destrezas adquiridas en un proceso de aprendizaje social", donde cada líder tiene un capital individual que logra conjuntar y unir en uno colectivo, logran formar redes de colaboración, tanto personales como institucionalizada. El clúster resultado del capital social y la acción del líder Los clúster en los países desarrollados se han convertido en una herramienta de desarrollo económico, las iniciativas de agrupación eran asociadas a las economías avanzadas, con proyectos de agrupaciones de desarrollo basadas cada vez más popular en las economías desde la década de 1990. Paradigma que en México los lideres de diferentes sectores han promovido; enn Jalisco a finales se los 90's se inicio. Para efectos de este estudio asumimos el alcance de clúster que define Garnica, (2004) como "un conjunto de vínculos e interdependencias entre diversos actores (empresas, universidades e instituciones puente) que se involucran en la cadena de valor dedicada a producir bienes, servicios y procesos de innovación". Para que este fenómeno se dé primero deben existir líderes y actores que sean capaces de construir el capital social necesario para la consolidación del clúster. (Macías, 2002), definió a los clusters como conjuntos de empresas en un territorio, que compiten y se apoyan entre sí en una entidad socio territorial que se caracteriza por la presencia activa, tanto de una comunidad de personas como de un conjunto de empresas en una zona territorial determinada. Fenómeno que se da ampliamente en el sector de muebles, caso de este estudio.

#### El Capital Social Como Plataforma Del Clúster

Los clusters han sido analizados por los sociólogos y teóricos de la organización enfatizando la importancia de incorporar las redes sociales y el capital social que lo sustenta. El capital social, lo han definido a finales del siglo XX como la ciencias del desarrollo, conformado por el grado de confianza existente entre los actores sociales de una sociedad, las normas practicadas de comportamiento cívico y el nivel de asociatividad (Kliksberg, 2002).

La CEPAL, (2003:13) define el capital social como "el conjunto de relaciones sociales caracterizadas por actitudes de confianza, comportamientos de cooperación y reciprocidad. Se trata, del recurso de las personas, los grupos y las colectividades en una relación social, en las redes de asociatividad de grupos". Mientras que Casanueva, Castro, & Galán, (2009:40) definen el capital social "como una red de relaciones que posee una organización o individuo, la cual le proporciona valor al permitirle el acceso a los recursos que están incrustados en la red". Casanueva, Castro, & Galán, (2010) concuerdan con CEPAL en relación al capital social, visto como "una red de relaciones que posee una organización (o individuo), la cual le proporciona valor al permitirle el acceso a los recursos que están integrados en la red". Las redes de negocio según Contreras, López, & Molina, (2011:4) se encuentran conformadas por una dirección de colegas u socios, clientes, proveedores, trasportistas, distribuidores y contactos en las universidades, centros de investigación, firmas y asesorías. Bourdieu, (1980) define al capital social como "el conjunto de recursos que están ligados a la posesión de una red sostenible de relaciones más o menos institucionalizadas, de intercomunicaciones; en otras palabras, que estén ligadas a la pertenencia a un grupo, como conjunto de agentes que no están dados con propiedades comunes, pero están unidos por vínculos permanentes y útiles". En cambio Ostrom, (2003:160) clasifica el capital social con una visión minimalista "el acceso de las personas a redes personales favorables", lo desarrolla cada individuo en relación a los contactos o amigos que puede encontrar a su alrededor, el cual este capital social se desarrolla a veces a costa de los demás.

Existe mucha literatura del capital social, lo cual nos lleva a entender que tiene varios alcances desde el punto antropológico y económico. Resulta difícil encontrar teóricos con una sola visión, algunos retoman el concepto, como un recurso estructurado dentro de una red o grupo social del que se obtienen beneficios en su mayor parte. Otros lo asumen como un conjunto de valores, en los cuales describen la vida diaria de las personas en la familia y la organización empresarial, la mayoría coincide que sustentan el desarrollo de grupos, en este caso de un clúster, donde se destaca como elemento esencial, la confianza, cooperación y una visión común. Ver figura uno donde se visualiza el CS como el pilar fundamental para generar cooperación.

*Enfoque de CS con el capital humano*:Por lo tanto, son dos variables elementales CS y capital humano (CH) para que se de la colaboración exitosa. Coleman, (1988:97), refiere que el "capital social en la creación de capital humano facilita ciertas acciones de los actores, ya sean personas o empresas los actores dentro de la estructura, puede ser factor clave para la determinación de tareas o actividades dentro de una grupo social".

La confianza como esencia del capital social: El CS lo establecen como el grado de confianza entre los actores sociales de una sociedad, las normas de comportamiento cívico practicadas que caracterizan a la misma, cuando alcanza altos niveles de asociatividad, indica que es una sociedad con capacidad para actuar cooperativamente, armar redes, concertaciones, sinergias de todo orden en su interior, citado en (Contreras, López, & Molina, 2011:1). Autores que han trabajado el tema (Madrigal, Arechavala, & Madrigal, 2012) (Putnam, 1995); (Ostrom, 2003), (Lechner, 1999) y (Morales, Sanabria, & Arias, 2010)La confianza juega un papel importante en el ámbito competitivo en los sectores productivos, ya que esta, es un valor de las relaciones sociales que permite emprender, trabajar y desarrollarse en conjunto. "Las disposiciones necesarias en el valor competitividad tienen que ver con representaciones de una realidad adversa, de recursos (entre ellos tiempo), un escenario o un campo social, disposiciones a "jugar" en determinadas condiciones y tener disposiciones a pro-accionar y reaccionar ante las configuraciones del campo" (Contreras, López, & Ríos, 2011).

*Beneficios y sustentabilidad del clúster y establecimiento de redes*: El capital social es la determinación del comportamiento, rendimiento y desarrollo de las empresas. Yamamura, (2008) y Casanueva, Castro, & Galán, (2010) refieren que existen cada vez más evidencias de que el rendimiento empresarial está influenciado por determinadas características de las redes inter-organizativas en las cuales incluyen los

tipos de relaciones que se producen en determinadas redes, basándose en la confianza y cooperación que a la vez fortalece el capital social, así como las características de los actores que conforman el clúster.

Figura1: El capital humano como el pilar para formar un capital social, para la colaboración en la organización





# METODOLOGÍA

Se determinó utilizar la investigación aplicada, exploratoria, bibliográfica y casuística por considerar cada institución que forma un caso de estudio al igual el líder que está al frente del clúster. Para la comparativa de los clúster en el mundo se analizó la estructura de los más exitosos de otros países como Italia y Alemania, así como el modelo del clúster de la industria mueblera de Jalisco, México Apoyados por los instrumentos de investigación como: el cuestionarios, guías de entrevista semiestructurada aplicadas a informantes claves: cuatro responsables del clúster, tres actores de gobierno, tres empresarios y tres presidentes de asociaciones. Se organizó un grupo focal de 17 personas, integrado por los principales actores del clúster; directores de CS Muebles, representantes de las asociaciones y gobierno (AFAMJAL, CAREINTRA y SEPROE entre otros ), entre otros, así como fabricantes del sector mueblero y decoración del estado de Jalisco, con la finalidad de conocer, realizar un diagnóstico del clúster, además de la identificación del capital social, las sugerencias para la articulación y consolidación del mismo. A estos actores se aplicó un cuestionario interactivo y a la vez ellos plantearon la propuesta.

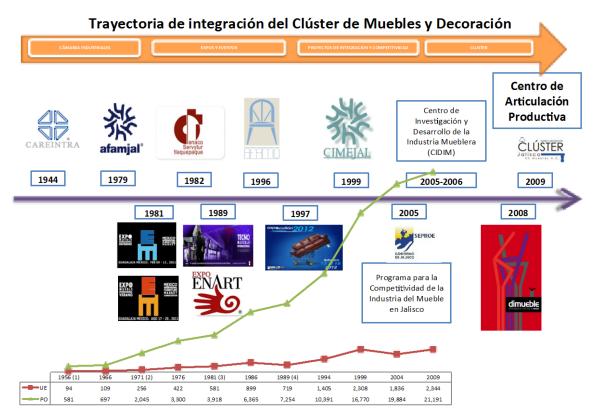
#### RESULTADOS

El capital social está relacionado con los procesos de aprendizaje que interactúa dentro de las organizaciones, convirtiéndose en el motor del desarrollo, dando como resultado el impulso económico de las industrias. El clúster muelero y la decoración del estado de Jalisco, se encuentra en la fase de sensibilización y construcción del capital social necesario para que se dé la cooperación y trabajo en conjunto, entre las organizaciones que lo conforman, así como, con los proveedores, además de las instancias que intervienen en la cadena productiva. En la figura dos, hemos descrito la evolución del sector desde 1944 hasta el 2009, cuando se constituye el CS Muebles y decoración del estado de Jalisco, (ver figura 2).

De las grandes fortalezas del sector de muebles es el crecimiento que se identifica tanto en personal ocupado como el número de empresas. En 2004 de 1,836 se incrementa en el 2009 a 2,344, con un incremento del 22 por ciento. Así mismo sectores, empresarios que han sido considerados a trabajar con y como clúster, como es el caso de los transportistas, proveedores, textil y herrajes entre otros. Ante este

fenómeno los líderes de muebles y la decoración en el estado Jalisco han estado trabajando en la creación del clúster. El cual, está integrado por la Secretaría de Promoción Económica (SEPROE), La Camara Regional de la Industria Regional de Transformación (CAREINTRA), La Asociacion de Fabricantes de Muebles de Jalisco (AFAMJAL), Cámara Nacional de Comercio, Servytur de Tlaquepaque (CANACO), Asociación de Fabricacion de Muebles de Ocotlán (AFAMO), Camara de la Industria Mueblera (CIMEJAL), mesas de trabajo con universidades (UdeG, ITESO, Tec de Monterrey e UTEG), además de la Fundación Mexicana para la Innovación y Trasferencia de Tecnología en la Pequeña y Mediana Empresa (FUNTEC), el clúster es lidereado por CS Muebles y la decoración.

Figura 2: CS Muebles y decoración.



Fuente: Lozano y Madrigal 2012.

# Aprendizaje del capital social de otros países

¿Qué se aprender de los clúster consolidados de otros países? Alemania e Italia son dos países con desarrollos en el sector muebles, al haber implementado estrategias para la conformación de clúster. En el caso de la industria mueblera de Italia estaba concentrada por distritos industriales, los cuales en los años cincuentas pasaron de ser artesanales a ser un sector industrializado (Parrilli, 2008). Lo anterior condujo un desarrollo significativo, mediante la incorporación de maquinaria, asistencia técnica, perfilarse a nuevos mercados y consolidarse como clúster. Los clúster de Italia son reconocidos a nivel mundial por la evolución y desarrollo que han logrado mediante la innovación e implementación de nuevos procesos de aprendizaje, diseño, automatización en procesos computarizado, implantación de nuevos materiales, adaptación a nuevos estándares, uso de tecnología en la venta y comercialización de productos por medio de online, etc. En cambio el clúster de la industria de mueblera de Alemania, se caracteriza por su

El Clúster de Alemania se caracteriza por estar conformada por empresas grandes, las cuales superan el número de 112 personas por empresa y su principal línea de producción es la fabricación de muebles de cocina, con más de 172 trabajadores por empresa. Las fortalezas de los clúster se pueden apreciar en la tabla uno:

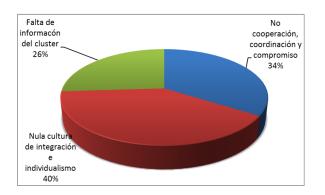
Tabla 1: Análisis comparativo de los clúster Italia, Alemania y Jalisco México

Clúster italiano	Clúster Alemán	Clúster SC Muebles Jalisco/México
Un sistema territorial delimitado	Alta tecnología en el sector	Conglomerado empresarial
Una comunidad de personas	Empresas claves del sector:	Incipiente innovación en tecnología
Empresas PYMES especializadas	Empresas de apoyo	Diseño y calidad
Calidad de los recursos humanos	Escuelas	Sector artesanal
Actores institucionales	Gobierno	Indicios de desarrollo en innovación del diseño
Proveedores, (Competencia y cooperación)	Dinámica del mercado internacional	Mercado interno
Clientes	Diseño e innovación:	No integración de la cadena productiva
Recurso humano calificado.	Capital social consolidado	Bajo nivel de capital social
La comunidad apoya al clúster	Visión común	En proceso de consolidación
Visión común	Grandes empresas	Pymes

Fuente: Elaboración propia, 2012.

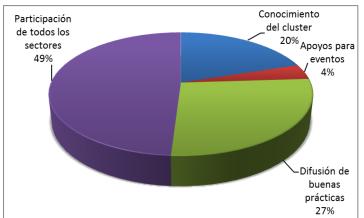
Tres variables que puede aprender de los clusters italiano y alemán: formar su recurso humano calificado, innovación y tecnología, vinculación con la universidad, gobierno, empresa y consolidar su capital social con una visión común.  $_{\dot{c}}$ Qué Opinan Los Líderes Sobre Su Capital Social? Los lideres y actores del clúster tanto gobierno, asociaciones y fabricantes están conscientes de lo que ha limitado el desarrollo del clúster, es la nula cultura de integración representado por el 40%, como segundo factor es la falta cooperación y compromiso entre los actores teniendo un 34% y por último, la falta de información y comunicación entre los integrantes del clúster. Lo cual se deduce que son barreras para el CS (ver figura 3).

Figuera 3: Factores que limitan el desarrollo del clúster



Fuente: (Madrigal Torres, y otros, 2012).

Para fortalecer e incrementar la confianza entre los integrantes que conforman el clúster, la participación activa y relación directa entre los sectores (gobierno, asociaciones y fabricantes) es esencial para la construcción de lazos de confianza, así como la difusión y apoyo, para la implementación de buenas prácticas en el sector, un porcentaje considerable dijo, que la difusión del clúster seria una estrategia para crear confianza, (ver figura 4).



### Figura 4: Acciones y estrategias para incrementar la confianza

Fuente: Resultados del grupo focal, (2012).

Los principales problemas que manifiesta el clúster en primer lugar es la falta de trabajo en equipo, cooperación e integración del sector muelero, en segundo es la falta de implementación de innovación y diseño e integración de empresas de apoyo (proveeduría), en tercero, nula integración de una visión en común, así como también un bajo nivel de cultura empresarial y desconocimiento en materia de comercialización por parte de los fabricantes. El capital social sin duda es un factor importante en el desarrollo de los clúster, (Barba, 2011) para desarrollar y construir el capital social, un elemento que puede ayudar a fortalecer el capital social es mediante la participación de los actores y proximidad en sus diversas dimensiones físicas, económica, social, cultural y tecnológica. El líder es el que debe desarrollar está fase del CS. Para lo cual describimos los fenómenos y retos de movilidad de líderes o responsables del clúster. Alta rotación de personal directivo del clúster, así como perfil de los directivos y débil liderazgo en el sector, (ver tabla 2).

Nombre	Periodo	Perfil/ escolaridad	Logros
Alfonso Padilla	2009	Empresario	Precursor y líder empresarial
Armando Elizalde Lozano	2010	Economista, consultor y asesor	Estrategias en marcha
Martin López Ramírez	2011	Empresario	Expo las Vegas
Yadira Reynoso Ayala	2012	Consultora y analista	Capacitación y socialización

Fuente: Elaboración propia, investigación 2012.

Periodos muy cortos de gestión en las cámaras empresariales. 2 años no coinciden los cambios. Una política no clara y consolidada del sector gobierno en lo relacionado al fomento y desarrollo de clúster. Así como, la alta rotación de los responsables del clúster. Por lo anterior, algunos de los líderes han cambiado de paradigma y en junio del 2012, AFAMJAL asumió el liderazgo del clúster, el cual ha emprendido acciones de socialización, generación de confianza en un proceso de educación, reeducación y aprendizaje constante que tiene que venir a la par con un programa de capacitación, formación y de estímulos fiscales, programas de innovación y tecnología. Además, se ha invitado a otros actores ligados en la cadena productiva del mueble que se sumen en los trabajos del clúster y estos son:

- 1. Los productores de madera y la política de gobierno para fomentar las plantaciones de madera nativa y madera no nativa.
- 2. Los transportistas

- 3. Los insumos y troqueles
- 4. Los diseñadores de equipo y tecnología para la fabricación de muebles
- 5. Los comerciantes.
- 6. Las universidades, donde se encuentra el capital humanos especializado.

Ideas que comparten y sus fortalezas Al cuestionar a los actores del cluster, mencionan que lo que comparten en común con un 41% es competitividad empresarial y con un 28% desconfianzas, 20% posicionamiento de mercados. Lo anterior refleja que los empresarios estan concientes que se tiene que trabajar en mejorar su competividad en equipo y generar confianza, para se competitivos en otros mercados.

Figura 5: Ideas que comparte los integrantes el clúster de muebles de construir CS



Fuente. Elaboración propia, investigación actores 2012

## Acciones Y Estrategias Para Incrementar La Confianza

Al cuestionar a los actores ¿Qué acciones propone para incrementar en el corto plazo la confianza de los empresarios en el proyecto de clúster encabezado por CS Muebles? En primer instancia proponen con un 49 por ciento la participación de todos los actores. Lo cual refleja la sencibilidad que tienen de la importancia del trabajo en equipo. Ante los resultados de la investigación y análisis de la literatura se propone que el primer paso para el éxito de un cluster es la construcción de su capital social y la construcción de una visión en común da como resultados los vinculos de cooperación e integración que sustente el cluster.

# CONCLUSIONES

Sin duda el capital social juega un papel importante en el desarrollo de las empresas, organizaciones y conformación de clúster. Para Alburquerque, (2006), el aprendizaje regional mediante el capital social y la confianza en las redes entre empresas, son cruciales el contexto social y cultural tanto de la infraestructura de investigación como de la red de relaciones entre empresas y actores territoriales, el desarrollo del capital social favorece a la innovación mediante las relaciones de cooperación en los actores que participan en los clusters, en cambio para Jung & Garbarino, (2006), las relaciones sociales y movilidad del recurso humano genera una mayor transferencia de conocimientos, dando la oportunidad al desarrollo a las aglomeraciones empresariales y formación de clúster. Fenomeno que se esta generando en este cluster estudido. Lo que ha limitado el desarrollo del clúster mueblero y la decoración del estado de Jalisco, es esta integrado por varias asociaciones y se trabajo en consolidar el cluster, descuidando la construcción primero del CS, necesario y con ello la formulación de una visión clara en común y de continuidad por parte de los actores claves. Para fortalecer el capital social del clúster se tienen trabajos incipientes de colaboración en conjunto en un mismo objetivo o un plan de desarrollo que integre tanto a el gobierno, organizaciones empresariales y (universidades, generadoras de conocimiento y recurso humano calificado) logrando el fortalecimiento del capital social.

Se identifica que el clúster de muebles, que existe un frágil capital humano y social, ya que a la respuesta de ellos mismos sus problemas se sustentan en que hay individualismo, desconfianza, comportamientos individualistas y protagonismo así como una ausencia de liderazgo integrador y transformador, que sea capaz de transformar las debilidades en fortalezas. Fenómeno que no se ha podido consolidar el clúster entre otras tres variables que es: alta rotación de los directivos del clúster, la estructura organizacional que propusieron, el protagonismo de los actores y sobre todo la cultura empresarial prevaleciente.

Ante la evolución y los trabajos realizados desde hace más de una década en la meta de integrarse y cooperación mediante una estructura de clúster y consolidación de la cadena productiva. Se han identificado grandes fortalezas de cada una de las instituciones; pero trabajando en forma aislada, a partir de agosto eligieron un nuevo líder con experiencia y que ha sido representante de tres de las cuatro asociaciones muebleras del estado de Jalisco. Propuesta y sugerencia Liderazgo para conformar el capital social de un clúster apoyados por la teoría de Andersson, Hansson, Schwaag-Serger, & Sörvik, (2004) hemos construido el perfil del líder para la planeación, puesta en marcha de un clúster así como las competencias y fases que tendrá que desarrollar el líder para conformar el capital social Requisitos: En primera instancia el líder tiene que ser un personaje aceptado, con autoridad legítima, amplio conocimiento del sector, capaz de ser independiente a los intereses individuales y genere consensos e intereses generales y una visión en común. Habilidades interpersonales: Ser un facilitador, genere consensos, negociación y comunicación, analista, reflexivo, generador de recursos y asegurar los existentes.

*Cualidades:* sentido de servicio, paciente, respeto a las estructuras, incluyente

Conocimientos: Técnicos, de negocio, de mercado y sea visionario

*Administrador:* Proactivo, retador, deseos de superación, tenga jerarquía y autoridad, poder, sea sensible e insensible.

### **FUNCIONES**

- 1. Construir el capital social. Conocer la cultura y el sector para empezar a generar confianza, lograr y alimentar la confianza del equipo.
- 2. Desarrollar vínculos. Auditar las competencias, tanto de producción como de mercado, establecer visión común y evaluar constantemente.
- 3. Definir estrategias y visión. Definir las estrategias y visión, así como las acciones, evaluar resultados, metodologías y establecer redes de cooperación.
- 4. Poner en marcha el clúster.

Estas son las acciones elementales para construir un clúster. El fenómeno que se dio en CS Muebles y decoración, fueron primero constituyeron el clúster, se han enfrentado al fenómeno de la cultura individualista y no una visión en común en esta fase se encuentran en la conformación y unificación de su capital social, partiendo del individual para sumarlo como equipo y consolidarlo.

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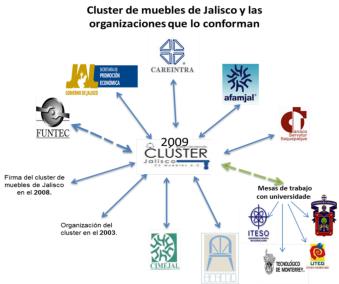
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Anexo 1: Clúster SC Muebles del estado de Jalisco

Fuente: (Madrigal Torres, y otros, 2012)

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#### RESUMEN

El propósito de este trabajo es identificar y caracterizar perfiles de empresarios PYMES utilizando el enfoque de las narraciones y obteniendo información a través de entrevistas en profundidad. Lo que se busca con esto es comprender las especificidades del proceso de toma de decisiones de este tipo de empresarios, de manera de entender qué factores influyen en su estilo de decisión y cómo inciden estos modelos decisorios en el desempeño de la organización y en el desarrollo de ventajas competitivas sostenibles en el largo plazo. Se espera que los resultados del trabajo resulten de utilidad para el diseño de políticas de fomento al desarrollo empresarial y para el sector de la Pequeña y Mediana Empresa, teniendo en cuenta rasgos personalísimos de quienes las conducen.

PALABRAS CLAVES: empresarios pymes - narraciones - decisiones estratégicas

## SME ENTREPRENEURS THROUGH STORIES: THEIR OWN IDIOSYNCRATIC STYLES

#### ABSTRACT

The purpose of this paper is to identify and characterize entrepreneurs' profiles in SMEs using narratives and information obtained through interviews. The aim of the study is to understand the specificities of the decision making process in this type of business. We tend to identify which factors influence their decision style and how these models affect firm's performance and the development of sustainable competitive advantages in the long term. We expect to generate useful results for the design of policies to promote SMEs, taking account of the personal traits of those who lead them.

**JEL:** M10 – M20

**KEYWORDS:** SME entrepreneurs - stories - strategic decisions

## INTRODUCCIÓN

Desde hace varios años ya no se discute ni en nuestro país ni el resto de los países de la región el rol estratégico que pueden cumplir las empresas pymes -Pequeñas y Medianas Empresas- tanto como generadores de empleo a partir de la actividad que desarrollan, como promotoras de procesos económicos-productivos complejos, asociados entre otras cosas a la reindustrialización local y a la mayor integración productiva regional. Este protagonismo no resulta menor, en el sentido de que a través del mismo no solo importantes colectivos sociales que no logran insertarse en unidades productivas mayores, pueden acceder a los ingresos necesarios para su supervivencia material, sino porque en lo fundamental, el mismo [el protagonismo de las pymes] bien puede encausarse hacia una contribución no menor en términos de diversificación productiva de la región que podría derivar en aumentos de competitividad de la economía. Aumentos nada despreciables en el capitalismo ultra-competitivo, global, interconectado e

informacional en que vivimos, lo que además podría derivar en inserciones laborales de mayor calidad en oposición a la proliferación de empleos precarios -en conjunto de las economías- de las últimas décadas.

Sin embargo entre este rol genérico e ideal que podrían o deberían asumir las pymes y el rol que efectivamente están llevando adelante en los espacios locales, existe una brecha. Brecha que muchas veces aparece difusa al no diferenciar afirmaciones normativas del tipo "qué deberían ser las pymes" versus positivas vinculadas a afirmaciones tales como: "que son realmente en la práctica este tipo de empresas" y en lo fundamental, al no centrar los diagnósticos preliminares al diseño de políticas en reconocer las especificidades y complejidades que atraviesan, no ya la abstracción que significa una unidad productiva, sino las involucradas en el ser, sentir y actuar de quien las conduce: el empresario pyme, artífice, promotor y hacedor de de un engranaje al que llamamos empresa.

Bajo este marco y adhiriendo a la idea de que la política pública bien planificada no solo debe reconocer y considerar el desempeño de las empresas pymes en la práctica, sino en lo fundamental debe pensarse en clave de reconocer al empresario en tanto decisor de la empresa, como un sujeto social cargado de subjetividades y condicionado además por un contexto económico, social, político y cultural que lo atraviesa y circunda, el propósito de este trabajo es contribuir a identificar y caracterizar perfiles de empresarios pymes utilizando el enfoque de las narraciones y obteniendo información a través de entrevistas en profundidad, a fin de comenzar a comprender las especificidades del proceso de toma de decisiones de este tipo de empresarios, de manera de entender qué factores influyen en su estilo de decisión y cómo inciden estos modelos decisorios en el desempeño de la organización y en el desarrollo de ventajas competitivas sostenibles en el largo plazo.

Así, a través de este procedimiento se espera una aproximación diferente a la comprensión del fenómeno de los empresarios pymes y las empresas pymes, al incursionar en el mismo no ya a través de caracterizaciones de las empresas, sino a través de interpretar y empezar a comprender quiénes son sus decisores, esto es, quiénes son los que en última instancia crean, gestionan y le dan vida a este tipo de empresas. De esta manera es que esperamos que los resultados del trabajo resulten de utilidad para repensar el diseño de políticas de fomento al desarrollo empresarial a nivel local y para el sector de la Pequeña y Mediana Empresa, teniendo en cuenta rasgos personalísimos de quienes las conducen.

## **REVISIÓN DE LA LITERATURA**

#### Toma De Decisiones En Empresas Pymes: Revisión Teórica

Sostener escenarios competitivos requiere competencias que faciliten la toma de decisiones adecuadas para enfrentar incertidumbres y generar desafíos. Es por ello que en el ámbito de la dirección estratégica cada vez más se destaca la importancia de las decisiones empresariales como elementos claves para el desarrollo competitivo de las empresas (Druker, 2002; Mintzberg y Waters, 1990). En este marco, entendemos que una decisión estratégica tiene que ver con "la elección intencional o respuesta programada acerca de asuntos que materialmente afectan las perspectivas de supervivencia, bienestar y naturaleza de las organizaciones" (Schoemaker, 1993: 107).

En línea con esto la literatura que aborda la conceptualización del proceso de decisión plantea la existencia de tres enfoques tradicionales en torno al tema: el racional, el accional y el interpretativo. Así a través del *enfoque racional* se interpreta que las decisiones empresarias son intencionalmente ejecutadas y son la base de la estrategia organizacional, más allá de lo cual también se acepta la existencia de una racionalidad limitada en los agentes decisores (Simon, 1957), a la vez que se señala como principal crítica a esta escuela, que termina atribuyendo una relación directa entre racionalidad en la toma de decisiones y acción. Esto último, es abiertamente criticado desde el *enfoque orientado a la acción*, enfoque que considera que las acciones estratégicas no necesariamente responden a elecciones racionales. Así, autores

como Mintzberg y Waters (1990) sugieren que las organizaciones deben verse como generadoras de acción y que estas acciones estratégicas son creadas previamente a las decisiones que las fundamentan.

En línea con lo anterior, es importante destacar que tampoco el enfoque orientado a la acción reconoce que cada decisión tiene implícita una intención, una búsqueda y una percepción subjetiva de la realidad, cosa que sí aparece considerado en el tercer enfoque utilizado para comprender el proceso de decisión, que es el *enfoque interpretativo* (Laroche, 1995). Esta última perspectiva, sí considera que las decisiones deben ser entendidas como representaciones sociales que reproducen estructuras cognitivas vinculadas a la imagen de la realidad que poseen sus miembros, las cuales dependen directamente del contexto donde han sido sociabilizados (Giddens, 1991).

Asimismo, y más allá de las diferencias que pueden encontrarse entre los enfoques antes paneados, destacamos una crítica general hecha a las tres perspectivas, y es que en todos los casos la literatura que las contiene ha centrado la discusión en el análisis de las decisiones adoptadas dentro de grandes empresas y/corporaciones [particularmente de países desarrollados], dirigidas la mayoría de las veces por gerentes profesionales. Esta cuestión, sin dudas ignora peculiaridades que se presentan en las empresas pequeñas y medianas dirigidas por emprendedores (Gibcus et al. 2004; Papadakis et al., 1998; Brouthers, 1998; Beattie, 1999; Gilmore y Carson, 2000) e ignora también una cuestión no menor en nuestra opinión: las derivaciones y connotaciones que suponen para una empresa estar anclada en países periféricos con proyectos políticos-estratégicos particulares. La realidad es otra.

En línea con esto, destacamos el planteo que realiza Gibcus (2004) quien sostiene que estas teorías pensadas y generadas para grandes empresas [de países centrales] pueden reflejar erróneamente la realidad de las Pymes [locales] en el sentido que: 1) las Pymes tienden a tomar decisiones menos racionales; 2) las pymes enfrentan entornos más hostiles e inciertos, y 3) los empresarios de las Pymes suelen tener características particulares que influyen en el proceso de decisión que los diferencian de los gerentes profesionales. Así, conocer estas particularidades facilita la discusión en torno a cómo [potenciar un empresario pyme, y cómo] diseñar una "empresa inteligente" (Quinn, 1992) capaz de generar información en tiempo real y estructuras de soporte para la eficiencia en la toma de decisiones.

De ahí que, perfilar las características de quien decide dentro de la empresa, cómo elabora su estrategia y el tipo de decisiones que adopta sigue siendo un aspecto fundamental para el diseño de estas estructuras de soporte, procurando maximizar el rendimiento de la empresa tanto en su configuración interna como en el entorno competitivo que enfrenta. En cuanto a los atributos del decididor y como primera aproximación a los mismos, destacamos la importancia de reconocer variables demográficas y variables actitudinales. Respecto a las variables demográficas, distintos estudios han analizado los atributos sociodemográficos integrándolos a la denominada perspectiva teórica de "mandos superiores" (Hambrick y Manson, 1984). Desde esta teoría, los decididores, basan sus elecciones en sus experiencias idiosincráticas, valores y disposición que están directamente relacionadas con características sociodemográficas como, por ejemplo, el género (Klenke, 1996; Powell y Ansic, 1997), la edad (Okun, 1976; Johnson, 1990) el nivel educativo o la trayectoria profesional (Huffman, 1974).

Respecto a las variables actitudinales, adoptamos el análisis propuesto por Gibcus et al (2004) que, basado en la literatura, establece que para elaborar una taxonomía de decisores en las Pymes es necesario utilizar y/o considerar las siguientes dimensiones: 1) la frecuencia decisoria; 2) el grado de independencia en la toma de decisiones; 3) el grado de autoconfianza (Levander y Raccuia, 2001); 4) la ambición y motivación; 5) la estrategia de búsqueda de información; 6) las alternativas evaluadas antes de tomar la decisión (Brouthers et al. 1998); 7) la propensión al riesgo (Knight, 1921); 8) la presencia de problemas o cuellos de botella en el proceso decisorio (Gibcus y van Hoesel, 2004), y 9) la situación económica (Dess et al. 1997).Finalmente y para comenzar a cerrar esta parte de revisión teórica y empírica, queremos destacar que, tanto los atributos que definen al sujeto decisor como al modelo de decisión que sustenta la

organización inciden directamente en el desempeño y estrategias que definen la trayectoria de la empresa. Las profundas transformaciones en el entorno de las empresas han alterado profundamente las fuentes de generación de ventajas competitivas y ante las nuevas demandas los empresarios y por ende sus empresas se verán forzadas a replantear su lógica de inserción en los mercados y a encarar profundos procesos de cambio que generen las necesarias transformaciones en su lógica de funcionamiento interno y en la manera en que toman sus decisiones. De esta realidad, deben tomar nota las políticas públicas.

## METODOLOGÍA

Para este trabajo hemos utilizado el enfoque narrativo en virtud de nuestro interés por acercarnos, a través del relato de las decisiones empresarias, a la comprensión de las especificidades y complejidades que atraviesan el ser, sentir y actuar de quien las conduce: el empresario pyme. A su vez en el trabajo se decidió utilizar la técnica de la entrevista en profundidad, por cuanto el uso de la misma permitió obtener información intensiva, holística, contextualizada y personal sobre cómo se toman decisiones y cómo se actúa en este tipo de empresas. Las personas entrevistadas fueron en total 10, todas ellas a cargo de pequeñas y medianas empresas dedicadas a diferentes actividades representativas de la estructura productiva del partido de Gral. Pueyrredon - Argentina, una localidad de algo más de 500.000 habitantes, tal como se detalla a continuación:

- 1: elaboración y venta de productos alimenticios.
- 2: distribuidora de materiales eléctricos y telecomunicaciones.
- 3: de servicios gastronómicos y de restauración.
- 4: de servicio de planificación y organización de eventos.
- 5: servicios de esparcimiento y recreación.
- 6: venta de de libros y servicios afines.
- 7: fabricación, distribución y venta de diluyentes.
- 8: servicios de publicidad.
- 9: producción agropecuaria.
- 10: servicios inmobiliaria.

La selección de la muestra tuvo en cuenta la heterogeneidad de casos (sectores, perfiles empresariales y género). Asimismo, el tamaño de la muestra quedó determinado a partir de la saturación teórica de las categorías. En cuanto al análisis de los resultados una vez realizadas las transcripciones de las entrevistas (todas fueron grabadas) procedimos a leer en insistidas oportunidades las mismas buscando identificar aspectos diferenciales y semejantes que permitieran reagrupar relatos con alguna lógica analítica que surgiera de lo manifestado por los entrevistados. En lo que sigue proponemos recuperar palabras, decires y sentires expresados por diferentes empresarios pymes y que son los que se presentan comillados y en bastardilla.

#### RESULTADOS

#### Perfiles Decisorios Y Decisiones Estratégicas

A partir del análisis de la información obtenida en las entrevistas en profundidad pudimos corroborar luego de una lectura interpretativa detallada la existencia de siluetas decisorias heterogéneas y en particular pudimos identificar dos perfiles claramente contrapuestos entre los empresarios PYMES que decidimos caracterizar y presentar de manera explícita a continuación: el "Empresario que piensa y actúa estratégicamente" -EE- y el "Empresario que decide y actúa anclado en el corto plazo" -ECP-. Así y en líneas generales podemos decir que:

El primero de estos empresarios -el EE- se caracteriza por un perfil decisorio que combina racionalidad y "olfato" en las decisiones con un claro sentido profesional de dirección integral del negocio, destacándose de manera categórica en su propio decir la importancia de la toma de decisiones orientada hacia resultados estratégicos, sobre la base de reconocer de manera pormenorizada los múltiples factores internos y externos que condicionan el conjunto de decisiones empresarias, tanto como sus entretejidos y nudos críticos que son interpretadas [por el empresario y su equipo de apoyo que a veces son profesionales u operarios con experiencia en diferentes áreas] como cuestiones que deben ser resueltas en favor de objetivos estratégicos de largo plazo.

En tanto que el segundo tipo de empresario o segunda categorización, -el ECP- da cuenta de un empresariado cuyo perfil decisorio se erige de manera casi opuesta al anterior en el sentido que quienes se cobijan bajo este rótulo son empresarios que plantean que el accionar de la empresa y en consecuencia las decisiones que ellos toman son más bien menos elaboradas, instantáneas y de corto plazo y se hayan fuertemente influenciadas por lo que la experiencia propia del empresario junto a lo que a veces aportan los empleados, más lo que a dice el cliente y lo que es la competencia, sin evidenciar casi en ningún caso, un conocimiento que explicite un cabal conocimiento de rasgos concretos de los mismos, desconociendo u omitiendo de manera notoria otros elementos internos y externos que condicionan el negocio y las decisiones. En lo que sigue caracterizamos utilizando el enfoque de la narrativa ambos perfiles.

#### Empresarios Que Piensan Y Actúan Estratégicamente

Los empresarios que agrupamos bajo este rótulo son empresarios que piensan y actúan estratégicamente en el sentido que, para ellos, decidir tiene que ver de manera directa con *"orientar todo el accionar de la empresa hacia un objetivo estratégico"*. Así, reconocen de manera explícita que el desempeño de la empresa depende de una adecuada secuencia *"de decisiones estratégicas"*. En tal sentido, hablamos de empresarios que diferencian claramente las decisiones operativas de las decisiones estratégica y que valoran la buena decisión a partir de una visión integral de los impactos de la misma:

"Me parece que una buena decisión es una decisión donde uno alcanza el objetivo fijado y a su vez no genera un ruido en el entorno, o sea no genere un ruido negativo con mis clientes, ni con mis proveedores ni con mi personal, me parece que incluso puede uno potenciarlo y mejor la relación con ellos tomando una buena decisión" "me doy cuenta si la decisión que tomo es buena y mala, es midiéndola, básicamente es eso la repercusión que generó, el comentario de la gente que tenemos relacionada dentro de la empresa, los mandos medios, el directorio." En línea con esto, las decisiones de peso que toman estos empresarios las toman considerando información calificada y buscan minimizar el margen de error o incertidumbre: "las decisiones importantes donde la consecuencia de esa decisión tiene un efecto importante dentro de la empresa uno lo que tiene que evaluar es la información con la que cuenta y en el caso de que la información sea escueta uno se demora hasta conseguir la mayor cantidad de datos posibles para elaborar una decisión correcta. Uno trata de tomar una decisión con certeza básicamente y no con riesgo o incertidumbre" "uno cuando toma una decisión sabe que hay un porcentaje de error y trata de minimizarlo lo más posible." Y para reducir la incertidumbre es que se apoyan en información que pueden obtener de referentes que trabajan en la misma empresa.

En línea con esto, hay una valoración por la participación de empleados en determinado tipo de decisiones y si bien hay una impronta y manejo personal en las mismas se reconoce que cuando es necesario se delegan: "A mí me parece, que es muy importante tomar las decisiones con ellos, depende también las decisiones que hay que tomar, yo soy de la idea que hay que hacerlos participe de la mayoría de las decisiones, para que lo sientan como algo propio y lo puedan defender." Dado que se entiende que de esa manera se encauza mejor la acción y en consecuencia el logro de los objetivos empresarios: "Si vos tomas una decisión solo y no los participas, después ellos sin querer o a veces queriendo te lo pueden boicotear, en cambio si uno la presenta, ve los distintos pensamientos, las distintas ópticas de cada uno y

llega a un consenso, que le sirva a la empresa, siempre la prioridad es el beneficio de la empresa. Me parece que esta bueno porque cada uno lo tiene como propio y también lo defiende dentro de la empresa. "Así, hablamos de empresarios que ante la emergencia de una determinada problemática actúa indagando en quienes ellos reconocen que tienen más y mejor información en las diferentes áreas de la empresa: "para nosotros es muy importante apoyarnos en las distintas áreas en la toma de decisiones."

Un ejemplo de eso es que hoy la empresa esta divida en 3 divisiones especializas. Esto quiere decir que cada división tiene gente idónea capacitada en su área" que es la que brinda información específica en caso de presentarse problemas. A la vez también reconocen que para algunas decisiones recurren al asesoramiento externo, muchas veces asesoramiento profesional específico asociado a nudos críticos que se identifican en las diferentes áreas de la empresa: "Es muy importante [el asesoramiento externo] porque obviamente uno no sabe de todo y hay personas que se dedican, que estudian y que están buscando siempre cuáles son las alternativas, las variables y las nuevas tendencias de mercado, las nuevas herramientas que hay disponible. Uno tiene que relacionarse con esos profesionales para que a uno lo orienten y bueno ellos conocen cuáles son las mejores prácticas, nosotros no nos podemos poner a invertir tiempo y un montón de trabajo en algo que no sabemos".

Se percibe en ellos un conocimiento del contexto de la empresa elevado y preciso, y que se nutre además de múltiples fuentes. Llama la atención también que este tipo de empresarios mantienen y sostienen una relación estrecha con cámaras empresarias dado que entienden que la información que de allí se recibe es clave para contribuir a entender el mercado y hacer previsiones: "*Para nosotros es clave estar relacionados con estas entidades* [cámaras], *para saber cuáles son las decisiones que se están tomando* (...) [en el sector en general] *para ver cómo esas decisiones van a repercutir en nuestro día a día nuestro trabajo y las ventas*." En línea con lo anterior es que puede aseverarse que "*siempre*" buscan información para pensar y resolver un problema y además sus decisiones se basan en información integral de áreas internas y/o referentes de la empresa y/o se recaba externamente. A la vez, también propician vínculos con otras empresas del sector para obtener información y también beneficios: "*Mirá nosotros a la hora de tomar decisiones, nos ha venido muy bien integrar un grupo empresario.* (...) *nos hemos unido y uno de los temas que se empezó a ver era que todos le comprábamos a los mismos proveedores y podíamos llegar a utilizar nuestro poder de compra de manera unificada y para poder acceder en el mercado a descuentos diferenciales, lo que se llama pool de compras.*"

Finalmente en relación a las decisiones por áreas de la empresa, los empresarios que piensan y actúan estratégicamente trasladan las cualidades y rasgos anteriores a las diferentes áreas. Así por ejemplo, las decisiones del área comercial se plantean a fin de diferenciar a los clientes, además de pensarse e implementarse diferentes tipos de estrategias y medios para llegar al cliente. Las decisiones de área financiera llevan implícita una preocupación particular y un conocimiento explícito acercás de los riesgos financieros que deben minimizarse y esto se deriva de asociar la política de proveedores con políticas de clientes. Del mismo modo las decisiones del área recursos humanos conllevan exigencias técnicas para tomar personal a la vez que se llevan adelante capacitaciones permanentes al personal, valorándose a partir del impacto se cree generan en la empresa. Finalmente, del discurso de estos empresarios se desprende la vital importancia dada a tener empleados motivados y que defiendan la empresa, dado que se interpreta que eso repercute en el desempeño de la misma. Por último en cuanto a las decisiones en el área de producción también se piensan y ejecutan considerando múltiples determinantes sobre la base de *"implementar políticas para reducir stocks y hacer eficientes los pedidos"* 

#### Empresarios Que Deciden Y Actúan Anclados En El Corto Plazo

En oposición directa al empresario antes descripto, encontramos la figura del empresario que decide y actúa sin una perspectiva ni de futuro ni mucho menos estratégicamente, dado que se halla anclado en el corto plazo y en una visión carente de complejidad de su negocio. Para este perfil alternativo de

empresario, decidir tiene que ver con una cuestión diaria en el sentido que: "las cosas funcionen todos los días" Reconociéndose que el desempeño de la empresa depende "de las decisiones que se toman en el día a día". En línea con esto, se trata de empresarios que no piensan a largo plazo "En realidad hoy en día lo que podes hacer es trabajar y ver que es lo que puede llegar a pasar mes a mes, pero no a largo plazo" y que además no diferencian las decisiones operativas de las decisiones estratégicas, sino que la diferenciación de las decisiones la hacen por otras cuestiones tales como áreas o épocas del año:

"hay diferentes decisiones....sobre recursos humanos o aspectos laborales, financieras" "todos los días uno toma decisiones distintas, depende del día, de la época del mes, hay un montón de factores". Asociado a lo anterior, se plantea que las decisiones de peso que toman estos empresarios las toman con información limitada, vinculada a pareceres propios y a la opinión de algún empleado: "Por lo general cuestiones de tiempo o respuestas rápidas es en base a lo que yo sé, digamos." Evaluándose las buenas decisiones por el menor tiempo que llevan: "Y lo mejor sería tomar la mejor decisión en el menor tiempo posible pero todos sabemos que tomar una buena decisión implica de una buena evaluación y tiempo. Lo ideal sería tener la experiencia necesaria para poder responder rápido frente a situaciones."

Lo anterior implica hablar y pensar en empresarios que ante la emergencia de una determinada problemática actúa motivado por la rapidez "Por lo general ahí trato de tomar la decisión lo más rápido posible" y en base a la intuición personal o su propia experiencia, lo que implica resolver problemas "basado en lo que me parece y en lo que sé hacer" "En realidad sí, me baso mucho en la información que tengo yo y en la experiencias, quizás no sea un buen punto de partida, a veces tendría que consultar más". A la vez que reconocen que el asesoramiento externo al que recurren es limitado: "solo del Contador de la empresa" o bien plantean la información que se recibe de proveedores "Bueno los proveedores que te dan información de productos nuevos, de costos nuevos" resultando también que, fuera de esto no consideran como posibilidad ningún otro tipo de asesoramiento profesional dado que se cree que eso sería factible para negocios más grandes: "En este momento no [contamos con otro asesoramiento todavía no llegamos a esa etapa de abrirnos hacia lo que es el mercado más amplio" "profesionales como el contador que trabaja con nosotros, él nos da información de cosas nuevas que pasan o aumentos o impuestos nuevos y esas cosas."

Se percibe en ellos un conocimiento del contexto de la empresa limitado y con ciertas vaguedades: se menciona como cuestiones negativas para el desarrollo del negocio generalidades vinculadas con la falta de previsibilidad política, económica y social sin poder hacer precisiones más concretas al respecto y sin poder precisar condicionantes más directos a la operatoria del negocio. A diferencia del perfil anterior, aquí no hay ningún tipo de relación con cámaras empresarias si tampoco ningún tipo de integración ni vertical ni horizontal con otras empresas. En línea con lo planteado es que puede aseverarse que "nunca" buscan información para pensar y resolver un problema, y además sus decisiones son personales y no se delegar; meno en caso de ausencias mías o lo que sea, confío (...) [en algunos empleados] y sería el primero al que recurriría." A la vez para tomar cierto tipo de decisiones se basan en información limitada vinculada a pareceres propios y a la opinión de algún empleado, destacándose una combinación de informalidad en el manejo y confianza por ser pocos: "Y nosotros nos manejamos bastante informalmente, creemos que hay una confianza alta al ser pocos nos conocemos, y creo que hay un apoyo buen de parte de todos para que la empresa prospera porque nos va a beneficiar a todos."

Finalmente en relación a las decisiones por áreas se destaca que las mismas son entendidas por este tipo de empresario de manera simplificada: las decisiones del área comercial se asocian a *"la aparición de un nuevo producto, que se prueba, a ver si gusta a otras personas"*. No haciendo ningún tipo de referencia a estrategias comerciales ni reconociéndose medios para llegar al cliente al que solo se lo escucha cuando va al negocio. A su vez, las decisiones del área financiera se refieren a conseguir información sobre

préstamos sin poder darse mayores precisiones sobre el destino concreto que podría darse a los mismos. En relación al área de recursos humanos no hay políticas explícitas de búsqueda ni de formación y solo se pretende que el personal esté bien presentable y cumpla bien con su trabajo: *"Se busca gente que tenga buena atención y modales"*. Finalmente con relación al área de producción se comenta que las decisiones son de tipo informal *"por prueba y error"*, a la vez que se realizan consultas a otros empleados en algunas situaciones que *"si funciona bárbaro y si no, no"*.

#### CONCLUSIONES

El desarrollo antes expuesto apunta en lo fundamental a fomentar un acercamiento al empresario PYME, a partir de reconocer a través de su propio relato, lo que son ciertas especificidades personales a la hora de tomar decisiones: cómo piensa, cómo siente, cómo opina acerca de las decisiones que toma en su empresa, lo que implica reconocerlos tanto en su integridad y extensión como en sus limitaciones más expresas. A su vez, en el caso particular de los perfiles antes descriptos si bien reconocemos que representan dos extremos de un espectro con matices, también creemos que su particular consideración contribuye a interpretar de manera más acabada parte de las heterogeneidades propias del empresariado que conduce las pequeñas y medianas empresas, y en lo fundamental, dan elementos sustantivos a la hora de pensar en el diseño de políticas para empresarios PYMES en el sentido que, no todos los empresarios PYME y por ende sus empresas están en condiciones de contribuir a la mayor competitividad de la economía, pero sí todos ellos de una u otra forma, son fuente de ingresos para sus dueños y son claves en la generación de puestos de trabajo para terceros.De esta manera y para cerrar, en el mundo interconectado, global e hiper-competitivo que vivimos, es necesario potenciar ambos tipos de empresarios, ya sea que se piense en la competitividad del país, ya sea que se piense en el bienestar individual de las personas que trabajan en estas empresas. Aludir a estas diferencias es un primer paso, en un camino de sinceramiento hacia lo que es y representa el sector, que en última instancia nos va a beneficiar a todos.

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564

# EMPRENDEDORES FAMILIARES Y LA SUCESIÓN ADMINISTRATIVA: UN ANÁLISIS EN PEQUEÑAS EMPRESAS

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## RESUMEN

Este trabajo ha sido enfocado al tema de la sucesión en las pequeñas empresas familiares del sector servicios en su primera generación. Todo parte de una variable dependiente, la sucesión y de tres variables independientes, compromiso, legalidad y miedo a la muerte. De esta forma se analiza de qué manera afectan al proceso de la sucesión administrativa y la forma en que los tres modelos teóricos (teoría de los sistemas, teoría de la agencia y la teoría de recursos y capacidades de las empresas familiares) ayudan a guiar el camino más confiable, certero y preciso para el fundador de la organización en su respectiva toma de decisiones para la planeación de la sucesión administrativa. La metodología utilizada en este trabajo fue a través de la aplicación de un análisis factorial de componentes principales para determinar la variable dependiente e independiente. La comprobación de las hipótesis planteadas se realizó a través de un análisis de regresión. El resultado obtenido muestra la influencia positiva de las variables independientes legalidad y miedo a la muerte. Sin embargo, se ha obtenido una relación no significativa con la variable independiente compromiso.

PALABRAS CLAVE: Empresa familiar, sucesión, compromiso, legalidad.

## ABSTRACT

This work is focused on the topic of succession in small family businesses on the service sector in the first generation. There is one dependent variable, succession; and three independent variables, commitment, legality and fear of death. Thus, it's analyzed in which way these variables affect the process of administrative succession and the way that the three theoretical models (Systems theory, Agency theory and the family businesses resources and abilities theory) help guide the most reliable, accurate and precise path to the founder of the organization in his or her respective decision-making to the planning of administrative succession. The methodology in this work was through the application of a factorial analysis of the main components to determinate the dependent and independent variables. The testing of the hypotheses was done through a regression analysis. The result shows a positive influence of the independent variables "legality" and "fear of death". However, it's been obtained a non-significant relation with the independent variable "commitment".

**KEY WORDS:** Family businesses, succession, commitment, legality.

## INTRODUCCIÓN

La sucesión en la empresa familiar es un proceso planeación y administración de toda una vida, en la cual forman parte factores que van de la mano para el éxito mismo de la empresa (Aronoff, McClure y Ward, 2005). Dentro de esos factores se menciona que los hijos, desde temprana edad, deben conocer el negocio, fomentar el trabajo en equipo entre la familia posible sucesora, tener una seguridad financiera y establecer un adecuado plan patrimonial. En este trabajo se lleva a cabo un análisis detallado de tres de las teorías que estudian a las empresas familiares, las cuales son: la teoría de los sistemas donde explica Davis y

Lansberg (1983), que debe haber un correcto funcionamiento entre tres factores: familia, propiedad y dirección. La teoría de la agencia de acuerdo a Schulze, Lubatkin, Dino y Buchholtz (2001), se ha utilizado para criticar a las empresas familiares que tienen una organización estructural de las más costosas que se hayan visto hoy en día. Y la teoría de recursos y capacidades de las empresas (Wernelfelt, 1984), donde su principal característica es, que cualquier empresa familiar, debe analizarse internamente el recurso humano con el que se cuenta antes de proceder a cualquier solución externa aprovechando su ventaja competitiva desarrollada a través de los años.

#### Planteamiento Del Problema

En la mayoría de las familias el tema de la sucesión es muy complicado. Su buena planeación nos da como resultado el perdurar en el mercado, contar con una seguridad financiera personal y ser equitativo con los familiares futuros de la empresa. Una vez decidido de qué manera se va a transferir la propiedad, el fundador deberá saber qué criterio tomar para la distribución de la propiedad. De acuerdo a Carlock y Ward (2001), nos indican que el problema de la sucesión deriva en el momento que el patriarca o fundador fallece o simplemente desea ser relevado del mando. De acuerdo a Kets de Vries (1993), el 70% de los negocios familiares cierran al pasar a la segunda generación y el 90 % a la tercera generación.

Actualmente, el proceso de sucesión en las empresas familiares es un tema relevante debido a que el origen de las empresas son las familias. Al mismo tiempo son parte importante de cualquier economía mundial. Un ejemplo claro, en Estados Unidos de Norte América son responsables del 50% del Producto Interno Bruto (PIB) y de casi la mitad de fuentes de empleo generadas a nivel nacional (Rosenblatt et al; 1990; Weigel, 1992; Gersick et al; 1997) citados por Belausteguigoitia, (2004). No se diga en México y el resto del continente americano donde aún es mucho mayor.

#### Preguntas De Investigación

Planteado el problema, se mencionan las preguntas de investigación:

- Existe algún tipo de planeación en el proceso de sucesión de la empresa familiar?
- ¿Es el primogénito de la familia siempre el futuro representante de la empresa?
- ¿Están preparadas las empresas familiares para una sucesión?

El objetivo general de esta investigación es: determinar si en las empresas familiares existe un plan de sucesión administrativa. Y como objetivos específicos se plantean: Identificar las pequeñas empresas familiares que constituyan el objeto de estudio. Conocer si el primogénito sería el sustituto como sucesor principal. Determinar si existe miedo al plan de sucesión por temor al tema de la muerte.

#### <u>Hipótesis</u>

Las hipótesis formuladas serán un vínculo de unión entre el objetivo general, problema y las preguntas de investigación, donde todas ellas tendrán una relación directa y concisa con el tema a investigar (Hernández Sampieri, Fernández Collado y Baptista Lucio, 2010). Se partirá de las siguientes hipótesis de investigación:

H1. El compromiso que se tiene por parte de la familia del propietario de la empresa influirá positivamente en la planeación de la sucesión.

H2. El conocer y cumplir con los aspectos legales e impositivos de la empresa familiar ayuda a llevar a cabo una sucesión administrativa con menos riesgo de fallar.

H3. El miedo a la muerte es un factor que no influye directamente en la no realización de un plan de sucesión de empresas familiares.

#### Variable Dependiente Sucesión.

El acto sucesorio es un conjunto de actos preventivos que tiene como finalidad establecer un plan mediante el cual un negocio pueda transitar con el menor riesgo patrimonial posible, durante la eventual sustitución de un liderazgo personal, mejorando sus posibilidades de continuidad a través de generaciones y su operación adecuada (Muller et al. 2005).

#### Variables Independientes.

- 1. Compromisos. De acuerdo a la Real Academia Española (2011) se entiende por compromiso cuando se tiene una obligación contraída.
- 2. Legalidad. Al hablar de legalidad es cuando existe un sistema de leyes el cual debe ser cumplido y al mismo tiempo aprueba y castiga acciones, sucesos o eventos (Baca Olamendi, 2000).
- 3. Miedo. Perturbación angustiosa del ánimo por un riesgo, daño real, imaginario y recelo o aprensión que alguien tiene de que le suceda algo contrario a lo que desea (Real Academia Española 2011).

#### <u>Justificación</u>

Dentro de la sucesión se debe saber quién es la persona más idónea para que continúe con el rol de trabajo, quién la va representar cuando su fundador ya no esté o simplemente decida dejar en manos de alguien más la dirección del negocio. Además, de acuerdo a Koontz, O'Donnell y Weihrich (1998), en la sucesión debe existir una planeación sucesoria de tal manera que se tenga previsto qué hacer. Es importante mencionar que existen empresas longevas en el mundo, las cuáles han tenido muchos problemas de sucesión, sin embargo se han sabido adaptar a los cambios, teniendo una visión a largo plazo, pero sobre todo saben trabajar en equipo con un mismo tipo de cultura e ideales firmes. La sucesión es un tema el cual se debe investigar y analizar, para poder conocer cómo han trabajado durante cientos de años muchas empresas y de una u otra forma tratar de orientar al empresario familiar de Tecomán, Colima México, para que su continuidad prevalezca en un futuro.

#### Marco Teórico

La organización en las empresas familiares De las características principales de una empresa familiar es que el fundador es la persona que hace de todo, cobra, vende, compra, limpia, lleva la contabilidad, y un sin número de actividades que debe llevar a cabo, ya sea en una empresa de servicios o de producción. Al mismo tiempo, la toma de decisiones es muy centralizada, no hay políticas de recursos humanos, no existen conocimientos teóricos empresariales, carecen sistemas de control administrativo, por mencionar algunas (Fuentes Ramírez, 2007).Todas estas características hace que una transición de administración sea difícil de lograr, pero no imposible. Debido a este tipo de problemas de rasgos empresariales, personalista y poco profesional, este ambiente descrito anteriormente es ocasionado por tres causas principalmente:

Falta de diseño en su estructura organizacional

Falta de diseño de responsabilidades Falta de diseño en la metodología de trabajo. Es necesario mencionar que debido al concepto mismo de integrantes de la empresa familiar, ésta contiene ciertas ventajas competitivas basadas en los recursos intangibles ante el resto de organizaciones existentes en la sociedad. De acuerdo a Poza, (2005), las ventajas competitivas más importantes que las empresas familiares tienen se pueden mencionar: Existe una mayor sinergia de responsabilidades. Una relación más estrecha y comprometedora entre proveedores y clientes Mayor rapidez en la toma de decisiones, ya que los involucrados son familia. Rapidez en la transferencia de conocimientos y habilidades de una generación a otra. Una empresa pequeña de servicios, de acuerdo a la Secretaría de Economía del Gobierno Federal (2011), nos indica que es aquella que cuenta desde 11 hasta 50 trabajadores para los servicios y de 11 a 100 en la manufactura (Tabla 1). Por el tipo de ciudad que es Tecomán, las pequeñas empresas familiares podrán dedicarse al giro de los servicios, manufactura y agricultura.

Tabla 1: Clasificación de las empresas en México

Tamaño de la empresa por número de empleados	Micro	Pequeña	Mediana	Grande
Manufactura	1-10	11-100	101-250	Más de 250
Comercio y servicios	1-10	11-50	51-100	Más de 100

Fuente: http://www.economia.gob.mx/

De acuerdo a la Secretaría de Economía del Gobierno Federal (2011), la pequeña empresa ocupa un 2.7% de las unidades económicas a nivel nacional, mientras que la micro ocupa el 97%. El resto lo obtiene la mediana con un .2% y la grande con el 1%. De esta forma, el municipio es el reflejo de la nación entera (Tabla 2). De esta manera la muestra son las pequeñas empresas familiares dedicadas al giro de comercio y servicios en la ciudad de Tecomán, Colima, México.

Tabla 2: Universo empresarial en México

Empresa	% Unidad económica	Personal ocupado	% PIB	
Micro	97.0	47 %	31	
Pequeña	2.7	20 %	26	
Mediana	0.2	11 %	12	
Grande	0.1	22 %	31	

Fuente: http://www.economia.gob.mx

Los modelos teóricos de las perspectivas sobre las empresas familiares a estudiar son los siguientes:

*Teoría de los sistemas:* Según explica Davis y Lansberg (1983), es de los primeros modelos donde se ha llevado a cabo una investigación detallada del comportamiento de tres partes o subsistemas que forman un todo.

*Teoría de la agencia:* De acuerdo a Schulze, Lubatkin, Dino y Buchholtz (2001), la teoría de la agencia se ha utilizado para criticar que las empresas familiares tienen una organización estructural de las más costosas que se hayan visto en las empresas de hoy en día.

*Teoría de recursos y capacidades de las empresas:* Esta teoría surgió como una ventaja competitiva y fue creada por Wernelfelt (1984). Indica que la principal ventaja competitiva de cualquier empresa, se centra en los recursos y capacidades del personal al interior de la misma. Por ello, se recomienda que antes de buscar alguna solución por fuera de la empresa a cualquier problema que se pueda presentar, se debe hacer un análisis interno exhaustivo.

*Perfiles de sucesores exitosos:* De las decisiones más difíciles que el director general o fundador debe realizar al momento de la sucesión, es saber a quién se le va a transmitir la dirección para que lleve la administración del negocio, por lo menos por una generación más Poza, 2005).

*Plan de sucesión administrativo y estilos de retiros:* Muller et al., (2005), explican que la planeación de la sucesión administrativa significa el conocer y saber aplicar el conjunto de medidas personales, operativas y jurídicas que tiene como finalidad lograr la transición sucesoria. Sin embargo, es un hecho desafortunado de las empresas familiares que aproximadamente menos de un 5% de los directivos que planearon su sucesión, realmente salen del negocio después de haberse establecido un plazo de retiro y transferencia del poder.

*El compromiso de la familia:* Rosenblatt (1977), define el compromiso como la intención declarada o inferida de un individuo de mantener una relación con otro sujeto. El compromiso puede ser lo deseado personalmente o posiblemente lo obligado externamente (Kanter, 1972). La unión familiar así como el compromiso es un nexo común que cualquier empresa familiar debe tener, de tal manera que evolucionen y crezcan con éxito a través de las generaciones siguientes.

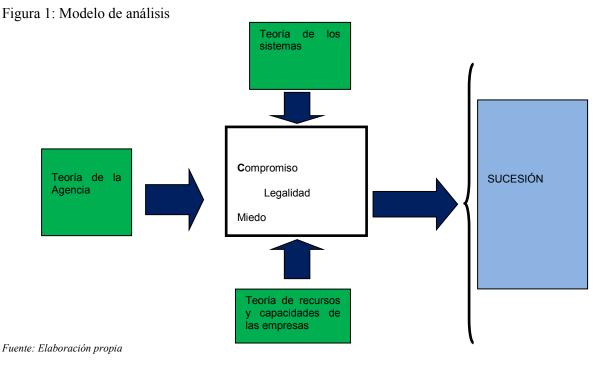
*Aspectos legales a considerar:* Los aspectos legales a tomar en cuenta en el proceso de la sucesión administrativa, será primeramente, saber bajo qué tipo de figura legal se encuentra registrada la empresa. De acuerdo a Muller et al. (2005), el testamento es parte complementaria del acto de sucesión, ya que éste se apoya de la voluntad en vida de una persona para destinar sus bienes y derechos de su propiedad o titularidad a favor de otra u otras. El miedo a la muerte. La tercera variable que se analiza en esta investigación es el miedo a la muerte. El hablar de la muerte es un tema bastante amplio y a la vez muy complejo, debido a que es un tema que debe ser analizado bajo cuatro perspectivas: biológica, social, legal y religiosa (Hernández Arellano, 2006).

## METODOLOGÍA

El método llevado a cabo en esta investigación fue la investigación de carácter cuantitativo correlacional, el cual ayuda a conocer o a medir el grado de relación que exista entre dos o más conceptos o variables. Su propósito es saber los comportamientos de las variables afectadas (Hernández Sampieri et al, 2010). Por ello interesa observar la manera en que las variables independientes influirán en la dependiente en la obtención de los resultados. La población, objeto de estudio, comprende a los propietarios de pequeñas empresas del área de servicios que se encuentran en la ciudad de Tecomán Colima, México, próximos a realizar la sucesión. La muestra utilizada fue de 38 propietarios de pequeñas empresas familiares de un total de 42 registradas en la Cámara Nacional de Comercio de Colima, México. Cabe aclarar que las 38 empresas están en proceso de sucesión, lo que viene a representar el 90 por ciento del total de las pequeñas empresas registradas que sí están en esa etapa. En el presente estudio, se ha obtenido la información a través de un cuestionario aplicado directamente a la muestra de pequeñas empresas familiares. Para la elaboración del cuestionario, se recurrió a investigaciones previas relacionadas con las variables independientes: compromiso, legalidad y miedo. Mediante el análisis crítico de las teorías y modelos propuestos se construyó el cuestionario conformado por 5 preguntas de la variable dependiente y 12 de las variables independientes relacionadas al tema de estudio.

Se procedió a la elaboración de una base de datos para su correcta validación a través del programa estadístico SPSS (Statistical Package for Social Science) versión 17.0. A partir de esta base de datos se obtuvieron los estadísticos descriptivos, la tabulación de las variables del estudio, la elaboración de las medidas de fiabilidad así como la elaboración del análisis de regresión. Posteriormente se continuó con la captura de la información para luego realizar el estudio detallado de la información. Este estudio se realizó durante el año 2011. La empresa familiar se considera de gran importancia en la economía de un país con un sistema de libre mercado, pues representa un alto porcentaje del total de empresas que operan

en este. En este campo se han llevado a cabo diversas investigaciones en varias áreas, sin embargo la sucesión sigue erigiéndose como uno de los temas trascendentales en el campo, por lo cual todas las etapas del tema de sucesión toman gran trascendencia (Rutherford et al; 2006).Es por ello que se propone en la presente investigación la aportación del siguiente modelo (Figura 1) donde se analiza cómo tres variables independientes son afectadas por las teorías de los sistemas, de la agencia y de los recursos y capacidades de las empresas, de tal manera que ayudarán a tener una mejor planeación de la sucesión administrativa en las empresas familiares.



#### RESULTADOS

Las generaciones que se han tenido en estas empresas familiares, el 47% están en la primera generación; un 40% ya tienen 2 generaciones de sobrevivencia y solo 13% las que están en la tercera generación. Según Kets de Vries (1993), comentaba, que el 70% de los negocios familiares dejan de existir al pasar a la segunda generación y el 90 % a la tercera generación. Se puede agregar que estas empresas en Tecomán Colima, México, son parte de la estadística de no sucesión administrativa exitosa. En cuanto al origen del capital de la empresa familiar, resulta que el 65.00% es de recursos propio, es decir son fundadores, mientras que el 35.00% es por herencia.

#### Análisis De Fiabilidad De Las Variables De Estudio.

A cada variable de esta investigación se le hicieron cuatro pruebas de fiabilidad así como el análisis factorial de tal manera de validar las preguntas cuestionadas. Las cuatro pruebas de fiabilidad fueron, Alfa de Cronbach, la prueba Kaiser-Meyer-Olkin (KMO), las comunalidades y la varianza. Fiabilidad y análisis factorial de las variables objeto de estudio. En la siguiente tabla se presentan los valores obtenidos, que resultaron todos aceptables, por cada una de las variables, tanto la independiente como la dependiente, por ejemplo el Alfa de Cronbach que arrojó valores considerados como muy buenos, la prueba KMO (Kaiser Meyer y Olkin), las comunalidades con valores mayores a .3 y la varianzas que resultaron con valores aceptables. Con estos valores es posible y aceptable la realización de un análisis de regresión.

Variables	Alfa de Cronbach	КМО	Comunalidades	Varianza
Dependiente Sucesión	0.83	0.50	Superiores al 0.45	60.62%
Independientes	0.81	0.79	Superan el valor de 0.30	58.17 %
Compromiso			-	
Legalidad.	0.74	0.72	Superiores a .35	58.79%
Miedo	0.65.	0.61	Mayores que 0.46	59.83%

Tabla 1: Resultados de las pruebas de fiabilidad de las variables.

Fuente: Elaboración propia.

Análisis de regresión. Al elaborar el análisis de regresión se obtuvo un  $R^2$  con valor de 0.71% que es un valor interesante por tratarse de un estudio empírico. Los resultados obtenidos a partir de la regresión permiten identificar la capacidad predictiva de las teorías convertidas en variables, como se muestra en la tabla 2.

Tabla 2: Resultados del análisis de regresión.

Variables	Coeficientes no	estandarizados	Coeficientes estandarizado	t os	Significación
	В	Error típico	Beta	В	Error típico
Compromiso	.117	.195	.117	.598	.554
legalidad	.386	.176	.386	2.194	.035**
Miedo	.292	.194	.292	1.504	.142

Fuente: Elaboración propia. \*\*\*P<0,01; \*\*P<0,05; \*P<0,1

Para conocer la influencia que ejercieron las variables independientes, se ha encontrado la existencia de una relación significativa de la sucesión con la legalidad, con un valor de 0.035, esto significa que los empresarios les importa mucho que el negocio familiar esté en regla pagando los impuestos requeridos por el SAT (Sistema de Administración Tributaria). Sin embargo la variable compromiso no resultó tener una significación con la variable dependiente sucesión. Esto se puede interpretar que por parte de la familia, puede haber problemas de administración en un futuro ya que no existe interés y deseo por realizar una correcta sucesión y por ende una equivocada planeación de la sucesión de la empresa familiar. Respecto a la variable miedo, el valor de significación fue .142, lo cual indica que los encuestados no tienen miedo de la sucesión en las empresas familiares. Esto se puede explicar de tal forma que los empresarios cumplen con la normatividad legal existente para este proceso, por lo que no les resulta tener pánico o pensar en que debido momento pudiera ser un problema sustancial la sucesión.

## CONCLUSIONES

En el presente trabajo se analizó la sucesión administrativa siendo afectada por el compromiso, la legalidad y el miedo a la muerte de los fundadores. Cabe mencionar que cada variable independiente nos arrojó valores que conllevan a las otras. Es por eso que los encuestados no tienen miedo de fallecer debido a que cumplían con todas las legalidades vigentes en la ciudad de Tecomán, Colima. De las variables independientes relacionadas en este estudio, como son compromiso, legalidad y miedo, se ha comprobado dos de las tres hipótesis planteadas. En cuanto a la primera hipótesis propuesta, en la que se menciona el compromiso, se ha obtenido una relación no significativa, este resultado es muy similar a los obtenidos por Ward y Sorenson, (1988); y Barach, Ganitzky, Carson y Doochin (1988), los cuales encontraron, que la mejor manera de entrenar a la siguiente generación para que dirija la empresa familiar, es comprometiéndose a trabajar y experimentar en carne propia.

Por lo que respecta a la hipótesis relacionada con la variable legalidad, se ha obtenido un valor positivo significativo que se relaciona con la sucesión de la empresa. De igual forma, con la relación a la tercera hipótesis, la variable independiente miedo, se ha comprobado, en virtud en que el valor obtenido no resulta tener una relación significativa con la variable dependiente sucesión. Respecto a los objetivos específicos planteados se observó lo siguiente. Se logró identificar a las pequeñas empresas familiares en

la ciudad de, Tecomán Colima, con ayuda de la CANACO local (CAMARA NACIONAL DE COMERCIO, 2011). Por lo que se refiere a quién sería el futuro sucesor, no existió una regla que siempre sería el primogénito, ya que en varias familias era el segundo o tercer hijo el cual se le veía con más aptitudes a obtener la sucesión de la empresa familia

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# CARACTERÍSTICAS Y CLASIFICACIÓN DEL COMERCIO INFORMAL EN CIUDAD JUÁREZ, CHIHUAHUA

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### RESUMEN

El presente estudio, hace una descripción de las características que presenta el comercio informal en Ciudad Juárez Chihuahua, México. En Ciudad Juárez, el alto índice de desempleos en el sector maquilador y el cierre de negocios debido a la creciente inseguridad, nutren al sector informal de forma exponencial. En la primera parte del estudio se presenta un panorama general del fenómeno de la informalidad; se hace el planteamiento del problema a investigar y los objetivos que persigue el estudio. Así mismo, se presentan las diversas ideas y posicionamiento de los expertos en el estudio del fenómeno de la informalidad; los alcances y el diseño de la investigación son presentados en la metodología utilizada. Los resultados que arroja la investigación, permite presentar un panorama general de las características que presentan los comerciantes de los mercados informales de la ciudad; así también, se dan a conocer la características de los establecimientos utilizados en la actividad del sector informal, y la clasificación utilizada por la dependencia a cargo de los informales. Se dan a conocer las estadísticas de cada una de las variables del estudio, así como un breve análisis de la relación entre variables; las conclusiones de los objetivos y las recomendaciones para posteriores estudios sobre el sector informal.

PALABRAS CLAVE: desempleo, informalidad, comercio, características, clasificación, estadísticas.

## CHARACTERISTICS AND CLASSIFICATION OF INFORMAL TRADE IN CIUDAD JUAREZ, CHIHUAHUA.

#### ABSTRACT

This study makes a description of the characteristics presented by the informal trade in Ciudad Juarez Chihuahua, Mexico. In Ciudad Juarez, the high unemployment rate in the manufacturing sector and the business closure due to the growing insecurity, nourish the informal sector exponentially. In the first part of the paper presents an overview of the phenomenon of informality; it is the approach of the research problem and the objectives of the study. It also presents the various ideas and positioning of experts studying the phenomenon of informality; the scope and the research design are presented in the methodology. The results shown by research, can provide an overview of the characteristics shown by informal market traders of the city, so too, are given to know the characteristics of the establishments used for informal sector activity and the classification used by the unit in charge of the informal sector. We present the statistics of each of the variables of the study, and a brief analysis of the relationship between variables, the conclusions of the goal and recommendations for further study on the informal sector.

JEL: A10, A12, J08, J10, J40

KEYWORDS: unemployment, informality, trade, characteristics, classification, statistics.

#### INTRODUCCIÓN

El análisis de la situación actual del mercado de trabajo informal, adquiere una importancia relevante, debido a la crisis económica y la carencia de empleos en el Estado de Chihuahua; como caldo de cultivo, impulsa el crecimiento de la actividad informal. Sin presuponer que la actividad económica informal tenga una relación directa con las actividades ilícitas, llamados giros negros o economía subterránea, actividades como la producción, distribución y venta de discos piratas y "fayuca"; En la economía informal podemos encontrar actividades con una composición y condiciones económicas múltiples, esto es, podemos encontrar actividades con fines económicos distintos.

Ciudad Juárez, como en la mayoría de las ciudades fronterizas, presenta una expansión del sector informal urbano, debido a la pérdida de más de 60 mil empleos en el sector maquilador; sumado a esto, la precariedad de los salarios, la inseguridad, la falta de políticas públicas y acciones de gobierno. Se presenta la oportunidad de conocer el comportamiento que han tenido las actividades informales a través de esta investigación, que realiza una descripción de las características que presentan los mercados y comerciantes informales de la ciudad. La ENEU, que tiene como objetivo obtener información estadística sobre las características de la ocupación de la población urbana, así como de otras variables demográficas y económicas; dejó de aplicarse en Ciudad Juárez en el mes de julio del 2003. De acuerdo a información ofrecida por la Dirección de Comercio Municipal, inician en el año 2007 con 1,098 vendedores informales; entre los años 2008 al 2010 se contabilizaban 2,731 de los cuales se regularizaron en el 2009, 1,321 y a la fecha se han regularizado 750, quedando aproximadamente 650 comerciantes sin regularizar. Sin embargo, indica la misma dependencia, que cada día se integran al subsector informal, un promedio de treinta nuevos ambulantes. El crecimiento del comercio informal se ha recargado hacia la zona sur oriente de la ciudad siguiendo el crecimiento natural de la misma, debido a que los programas de vivienda están proyectados únicamente para esta zona, donde se ubican también las grandes empresas y centros comerciales constituidos como empresas formales.

Datos del censo del INEGI 2005, indican que se construyeron más de 400 mil viviendas, y otras 85 mil en los años siguientes. Durante años, Juárez recibió la distinción como la comunidad donde se construyó mas vivienda en el país; azuzado por el boom de la también burbuja artificial de la maquiladora, está sujeto al vaivén de los mercados norteamericanos; el criterio de selección para la edificación de nuevas viviendas que sigue la mayoría de los municipios, es la reserva territorial. La cantidad de mercados informales, vendedores ambulantes, prestadores de servicios, presentan diversas características en la operatividad de sus actividades. De la misma forma, la clasificación adoptada por la Dirección de Comercio Municipal en Juárez, no está fundamentada en las propuestas por organismos internacionales. Los indicadores propuestos por los organismos especializados en el estudio del fenómeno, fueron tomados como base para el diseño de la investigación. La aplicación de un instrumento de medición diseñado con las variables que se consideraron necesarias para la recolección de la información, permitió obtener los datos suficientes para la aplicación de un programa estadístico que arrojó los resultados expuestos en el trabajo, a través de tablas de frecuencias y gráficos de cada variable.

#### **REVISION LITERARIA**

En la nonagésima reunión de la Conferencia Internacional del Trabajo (OIT) realizada en el año 2002. Se adoptó una resolución que proporciona un nuevo marco integral que refleja el consenso mundial mas reciente y amplio referido a la forma de abordar los desafios que plantea la economía informal. A partir de ello, se propone el término economía informal que incluye el de sector informal para dar lugar al conjunto de actividades económicas que, se encuentran insuficientemente contempladas por sistemas formales. De acuerdo con los datos de la Encuesta Nacional de Ingreso y Gasto de los Hogares de México (ENIGH), en 1984 existían 2 millones 401 mil trabajadores (12.6 de la PEA). Con una tasa media anual de crecimiento, entre 1984 y 1996 de 9.3 por ciento. Este grupo alcanzo la cifra de 6 millones 991 mil 898

personas en 1996; es decir, el 22.9 por ciento de la PEA ocupada. Esto nos dice que, este sector (informal) creció 81.7 por ciento. (Aguilar, G. 2000).

La característica heterogénea y compleja de la problemática de la informalidad y las modificaciones que, como todos los fenómenos socio-económicos, ha sufrido con el transcurso del tiempo, han generado no pocos inconvenientes para su análisis. La imprecisión que ha caracterizado su conceptualización, se ha reflejado en la presencia de un debate de larga data, todavía inconcluso, respecto de la aplicación del concepto de informalidad a distintos procesos de la economía y del mercado laboral (economía informal, sector informal, trabajo informal y precariedad laboral. (Novick, 2007).

La cantidad de personas ocupadas en el subsector informal de los hogares (SSIH) aumentó en los últimos 10 años; pasó de 8 362 miles de personas en 1995 a 11 380 miles en el 2004; esto implica que en estos 10 años se integraron más de tres millones de personas al trabajo informal, que representa un aumento global de 36.1 por ciento. (Fernández, et. al.2008) La expansión de la informalidad durante los años noventa ha sido un fenómeno común en América Latina. El informe de la decimosexta Reunión Regional Americana de la OIT realizada en el año 2006, estima que la economía informal afecta al 75 por ciento de los trabajadores en América Latina, contribuye con un 40% del PIB de la región, representando el 70 por ciento del número total de empleos creados en la época (Apella, 2009).

Más allá de las diferencias entre las distintas corrientes de pensamiento, hay consenso en que el sector informal incluye actividades heterogéneas que van desde trabajos ambulantes de carácter precario hasta actividades por cuenta propia y trabajo asalariado. Sin embargo, una característica común de todas las actividades informales es la baja productividad, por el uso de tecnologías obsoletas y trabajo no calificado (Castells, Portes y Benton, 1989; Rosenbbluth, 1994; Tokman, 2001; Maloney, 2004) En México las actividades informales se concentran en el Sector Institucional de Hogares (INEGI, 2004), y por sector económico en cinco grandes grupos de actividad: Industria Manufacturera, Construcción, Comercio y Restaurantes, Transporte y Servicios Personales. Adrián J. Miranda,(2010) señala que una clasificación se podría dar de acuerdo a las utilidades que genera, esto es, una clasificación basada en las utilidades que se obtienen de las actividades comerciales, profesionales y de servicios, debido a que básicamente en ello radica la posibilidad de pagar impuestos. El comercio informal se puede clasificar a través de los siguientes enfoques: El enfoque dualista cuyo origen se encuentra en la Teoría de la Dependencia, que otorga a las economías de los países en desarrollo un carácter estructural de subordinación de sus mercados internos respecto al mercado internacional, controlado por los países desarrollados.

El enfoque estructuralista que se refiere a los modos de producción arguyendo que aunque sobreviven, han sido capaces de renovarse y establecer relaciones funcionales con las economías modernas y transnacionales. Por ejemplo, cada vez más familias trabajan a destajo para grandes empresas globales. Aunque estas actividades son informales, ellas no se encuentran estructuralmente segmentadas y separadas de la formalidad, sino que ambas se vinculan estrecha y funcionalmente. La escuela económica neoclásica analiza la informalidad con base a la Ley de Say, la cual indica que, en condiciones de equilibrio (macroeconómico), toda oferta crea su propia demanda. Rechaza la idea de escasez de vacantes o de barreras en el mercado formal para absorber a todos los individuos. La informalidad se debe más bien a que las vacantes disponibles en el sector formal no cubren las expectativas de los trabajadores. En el enfoque institucional-legal se considera al sector informal como aquel que funciona al margen de la ley, es decir, es aquel que con fines lícitos utiliza medios ilícitos para conseguir esos mismos fines.

ley, es decir, es aquel que con fines lícitos utiliza medios ilícitos para conseguir esos mismos fines. Considera que en las sociedades en desarrollo tanto la formalidad como la informalidad traen consigo una excesiva carga normativa: los costos de acceso y permanencia en la formalidad son demasiado altos, tanto en tiempo como en dinero. Una de las características centrales de este sector y del trabajo precario, es su concentración en las zonas metropolitanas de las grandes urbes y de las ciudades emergentes. (Mulder, 1999; Cross, 1998; BNDS, 1996; Gordon, 1996; Ark, 1995; Dawson, 1995; y Gras, 1993).

Características que definen a las empresas informales:

1.- Las facilidades de acceso: determinadas por los bajos capitales y pocos requisitos de capacitación. Las ventas callejeras, servicio doméstico, reparaciones domesticas menores y otras actividades semejantes son realizadas por cualquier persona sin necesidad de entrenamiento especial.

2.- los trabajadores de ese sector suelen tener bajos niveles de educación y provienen mayormente de determinados sectores de la población (mujeres, niños, ancianos, inmigrantes urbanos recientes).\*

3.- tienen ingresos significativamente menores que los de los trabajadores del sector formal y sus oportunidades de progresar son muy limitadas.

4.- cuentapropistas, familiares no remunerados y trabajadores domésticos (Portes, 1995).

¿Quiénes son los trabajadores que muestran una mayor probabilidad de trabajar en el sector informal? La mayor parte de los estudios identifican al mismo grupo de trabajadores: aquéllos con menos experiencia y educación. En consecuencia, en el sector informal figura una gran proporción de jóvenes. Además, existe una probabilidad mucho mayor de que las mujeres trabajen en el sector informal. Por último, es menos probable que los jefes de hogar trabajen en el sector. (Freije, 2000). En el extremo inferior se encuentran principalmente trabajadores independientes que comercian con productos básicos, como son los alimentos o prestan servicios de transporte elementales. En el nivel intermedio se encuentran aquellos que se dedican a un comercio más organizado y a la transformación simple y a pequeña escala de bienes básicos para los consumidores de la economía informal, y dan empleo a familiares.

En el extremo superior se encuentran los que se dedican a la fabricación a pequeña escala con bajo nivel tecnológico, o que prestan servicios tales como la reparación de maquinaria y vehículos, dan empleo a familiares y a otras personas, y que suelen constituir microempresas. (OIE, 2002) El Subsector Informal incluye a los trabajadores por cuenta propia que ocasionalmente emplean asalariados y generalmente no se inscriben en registros oficiales, fiscales o de seguridad social, y parte de los dueños de los negocios informales pueden ocupar uno o más asalariados de manera continua, cumpliendo parcialmente con reglamentaciones o requisitos gubernamentales. Así, dentro de la economía informal quedan incorporados, los vendedores ambulantes de mercancías y de alimentos, artesanos, transportistas, prestadores de servicios domésticos de todo tipo y de reparaciones diversas, así como sexo-servidores, entre otras. (INEGI, 2004). Las microempresas, por lo general entendidas como unidades de producción con un número de trabajadores inferior a diez.

Todos los establecimientos que no cumplen con alguna disposición legal relativa al ámbito laboral. Aquellas unidades que incumplen alguna regulación gubernamental como el registro fiscal. Dichas unidades funcionan con bajo nivel de organización, poca división del trabajo y capital, con mano de obra y tecnología poco calificada; los activos fijos pertenecen a los propietarios y pueden ser utilizados indistintamente por su empresa no constituida en sociedad o por el hogar, no existen garantías formales de contratación y pueden realizar transacciones y contraer pasivos sólo en nombre propio.

El trabajo en la economía informal se distingue por sus reducidos y mal definidos lugares de actividad, condiciones inseguras y poco saludables, bajos niveles de competencias, productividad e ingresos, extensas jornadas laborales y restricciones al acceso al crédito. Asimismo, los trabajadores de la economía informal no son reconocidos, no se encuentran inscriptos y sus actividades productivas no están reglamentadas ni protegidas por la legislación laboral y de la seguridad social (Apella, 2009). Las investigaciones basadas en la definición que aporta Tockman (1978), se han inclinado casi exclusivamente a calcular el tamaño del sector informal, ya sea en términos de la población económicamente activa que absorbe, el número de puestos que origina, o de ambos. Con este propósito, el

empleo informal se define operacionalmente como el que abarca una o más de las siguientes categorías. Servicio domestico, autoempleo, trabajo familiar no remunerado y trabajo en pequeñas empresas que tienen menos de 5 y hasta 50 empleados, los estudios de PREALC estiman que el sector informal en los diferentes países Latinoamericanos abarca del 30 al 60 por ciento del empelo urbano.

En México, mediante la ENAMIN se puede caracterizar al Subsector Informal. Por ejemplo, a través de ésta se sabe que del total de la población ocupada en negocios informales el 36.9 por ciento son mujeres y el 63.1 por ciento son hombres, y que los motivos para iniciarse en alguna actividad informal son: 35.9 por ciento lo hacen para complementar el ingreso familiar, el 33.1 por ciento señaló que ganan más que como asalariados, el 13.6 por ciento porque no encontró empleo como asalariado, el 5.5 por ciento por tradición familiar, y el 11.9 por ciento del total de negocios informales por razones diversas, tales como horario flexible y pérdida de empleo, entre otras. Los negocios del sector informal de acuerdo a su antigüedad están integrados de la siguiente manera: 11.4 por ciento del total tiene menos de un año de haberse iniciado, 41.2 por ciento tiene de 1 a 5 años, 22.3 por ciento se ubican entre 6 y 10 años, y el 25.1 por ciento de los negocios cuenta con más de 10 años, es decir, cerca del 50 por ciento de estos negocios informales, sus dueños tienen como expectativas continuar con su actividad en un 89.6 por ciento, cambiar o abandonar la informalidad el 8.9 por ciento, y sólo el 1.5 por ciento no tiene planes.

Otra característica que se identifica a través de la encuesta, es que del total de negocios informales iniciados el 93.0 por ciento no solicitan créditos; 4.8 por ciento lo obtienen a través de amigos, familiares, vecinos o prestamistas particulares, y en menor medida en cajas populares; mientras que sólo el 2.2 por ciento restante gestiona financiamiento en instituciones bancarias o acude a otros intermediarios financieros. En México las actividades informales se concentran en el Sector Institucional de Hogares, y por sector económico en cinco grandes grupos de actividad: Industria Manufacturera, Construcción, Comercio y Restaurantes, Transporte y Servicios Personales.

Actualmente, el monto del Subsector Informal se ubica en 445,486 millones de pesos corrientes, que representan el 12.7 por ciento del PIB total del país, cantidad que equivale por ejemplo a casi tres veces el producto generado por la agricultura y ganadería consideradas de manera conjunta. Por su parte, las percepciones obtenidas por los dueños de los negocios informales, representan el 17.0 por ciento de las ganancias generadas por la economía en su conjunto. A su vez, este Subsector absorbe el 28.5 por ciento de la población ocupada total, excluido el sector agropecuario. Otro resultado relevante es que los negocios informales destinan sólo el 19.0 por ciento de sus ingresos a la compra de insumos, como electricidad, agua, teléfono, combustibles y diversas materias primas, entre otras; en tanto que por remuneraciones pagan únicamente el 9.2 por ciento. Estos resultados contrastan con los de la economía en su conjunto, ya que los gastos en insumos son de 44.2 por ciento y de 18.7 por ciento para el pago de remuneraciones. Cuando se analiza el Subsector Informal con relación a la producción nacional por sector de actividad económica, se observa que éste representa en promedio el 30.8 por ciento del Comercio y Restaurantes, 11.5 por ciento de los Servicios Personales, 6.1 por ciento de la Industria Manufacturera, y en menor medida en el Transporte y la Construcción con 4.6 por ciento y 3.3 por ciento, respectivamente.

## METODOLOGÍA

El alcance de la investigación es descriptivo; describir las características del comercio informal en Ciudad Juárez a través de la recolección de datos de las variables que presentan los comerciantes informales, como son: socio demográfico, tipos de establecimientos, jornada laboral, ingresos, servicio médicos tipo de negocio, antigüedad, horas trabajadas. Con un enfoque cuantitativo, debido a que los datos son producto de mediciones, se representan mediante números (cantidades) y se deben analizar a través de métodos estadísticos. (Hernández et al. 2006). El desarrollo del presente trabajo, se lleva a cabo en Ciudad Juárez Chihuahua, México en las zonas donde se ubican los mercados informales de la ciudad;

asentados en terrenos irregulares donde se observaron en primera instancia, un alto crecimiento del subsector informal; mercados móviles y semifijos, donde se concentran además, algunos prestadores de servicio. Los mercados en observación, fueron aquellos que se consideraron semifijos o móviles, que sus integrantes ofrezcan: artículos nuevos o usados; ropa, calzado, muebles y artículos para el hogar, herramientas, alimentos preparados, productos procesados en el hogar, servicios personales, cuentapropistas y sus trabajadores asalariados que no cuentan con seguridad social. Los resultados esperados en el mismo, podrán tener algunas diferencias en cuanto a características y clasificación que pudieran no estar consideradas en otros trabajos, debido a las diferencias en los tipos de mercancías o productos que se ofrecen. Así mismo, el Instituto Municipal de Investigación y Planeación, no cuenta con información actualizada y la Dirección de Comercio Municipal, carece de información actualizada en cuanto al número total de mercados y comerciantes informales. El diseño de la investigación es: no experimental transversal, se aplicó un cuestionario para la recolección de los datos y características particulares que presenta el fenómeno en su contexto natural, para su posterior análisis sin la manipulación de las variables. (Hernández et al.2006).

#### RESULTADOS

De acuerdo a las respuestas de los entrevistados, encontramos que 264 comerciantes informales originarios de Ciudad Juárez tienen de 2 a 5 años laborando en la actividad; mas 108 comerciantes que tienen 6 o más años de antigüedad en su negocio (50.2 por ciento). Haciendo un análisis de estos resultados: un poco más del doble de los comerciantes iniciaron labores a partir del 2007, con respecto a los 108 que conforman el grupo de 6 o más años, esto indica que la crisis económica por la que atraviesa el país, sumado a los altos índices de inseguridad que sufre la ciudad disparó el crecimiento de comercios informales del 2007 a la fecha. Por otro lado, se difiere un poco sobre la idea de que una de las causas del crecimiento de la informalidad, se debe a un alto número de migrantes, en primer lugar, debido a que el número de personas que llegaron de otras ciudades del país a partir de los noventas, optaron por establecerse en la ciudad, donde el promedio de años de residencia en Ciudad Juárez es de 25 años; estos resultados sumados al tiempo en que se "perdieron los empleos" nos indican que los nuevos trabajadores informales: son residentes de la ciudad con más de 25 años de establecidos y perdieron sus empleos en empresas formales a partir del 2007.

Haciendo un análisis con las variables: lugar de procedencia y tipo de establecimiento, los resultados marcan que los comerciantes informales provenientes del Sur y Centro del país utilizan en mayor número el tipo de establecimiento semifijo (11.6 por ciento), y en muy contados casos el establecimiento de tipo fijo (1.7 por ciento). De la misma forma, los habitantes originarios de alguna de las ciudades o poblaciones del Estado, incluyendo a Ciudad Juárez, utilizan el tipo de establecimiento semifijo (41.7 por ciento) y fijo (9.4 por ciento). Además de existir un número mayor de vendedores a pie (11.2 por ciento) entre los habitantes de Juárez y del norte del país.

Los comerciantes informales perdieron su anterior empleo en el sector formal debido al despido; 238 trabajadores fueron despedidos del año 2008 al 2011(32.1 por ciento). Por otra parte, 173 trabajadores renunciaron a su empleo (23.3 por ciento) por diversas razones, y 111 se quedaron sin trabajo debido al cierre del negocio o empresa donde laboraba anteriormente (15 por ciento). Debido a la pérdida de empleos en el sector formal, los ciudadanos buscan en la informalidad una válvula de escape para la presión económica por la que atraviesan.

La relación que se observa entre la antigüedad en la actividad informal y el tipo de establecimiento utilizado, es que el número de trabajadores con mayor antigüedad (6 o más años laborando en el subsector informal) posee el mayor número de establecimientos fijos (5.1 por ciento) y un 23.8 por ciento de establecimientos semifijos; en el caso de los comerciantes con menor tiempo en la actividad informal (hasta 2 años), tienen un número muy cercano de establecimientos fijos (4.7 por ciento).

De igual forma, los comerciantes con menos tiempo en la informalidad poseen el porcentaje más alto de establecimientos de tipo semifijo con un 28.7 por ciento del total. En el caso de los comerciantes que tienen laborando (3 a 5 años) optan también por establecimientos semifijos con un 14.4 por ciento y solo un 3.4 por ciento de los comerciantes con esta antigüedad, poseen establecimientos fijos.

Aunque los comerciantes "en vehículo" (3.9 por ciento) son los menos, es importante remarcar que los de menor tiempo en el subsector aumento en los últimos dos años, de un 0.9 por ciento, pasaron a un 2.2 por ciento, siendo que en los 6 años anteriores el aumento se daba en una decima por año. En el caso de la relación entre el tipo de establecimiento y el horario de trabajo, es notorio el alto número de comerciantes con establecimiento semifijo que laboran en un horario de 8 a 10 horas diarias (30.2 por ciento), seguido por el mismo tipo de establecimiento pero con un horario de 5 a 7 horas diarias (29.4 por ciento). En el caso de los comerciantes con establecimiento fijo, el horario mayormente utilizado es el de 8 a 10 horas con un 8.5 por ciento; seguido por un horario de 5 a 7 horas (2.8 por ciento).

Para los comerciantes ambulantes(a pie), el horario más utilizado es de 5 a 7 horas diarias con un 7.8 por ciento; igualmente, los vendedores con vehículo utilizan el mismo horario con un 2.3 por ciento. Esto indica que el horario diario de trabajo de los trabajadores informales, independientemente del tipo de establecimiento, se encuentra dentro de los parámetros de un horario regular en el sector formal. Aunque un alto número de comerciantes se negó a contestar (269) número que nos da un 36.3 por ciento del total, la relación existente entre la edad de los comerciantes y el monto de sus ingresos queda de la siguiente forma: las personas con edades de 29 años o más, son quienes obtienen mayores ingresos: con un 7.4 por ciento los que obtienen 1500 pesos o más. Un 17.3 por ciento obtiene ingresos de 500 a mil pesos y de mil a mil quinientos pesos, un 17.3 por ciento.

Enseguida se encuentran los comerciantes con edades entre 23 a 28 años que obtienen ingresos de mil quinientos pesos o más con el 1.5 por ciento; una tasa del 1.8 por ciento los que ganan de mil a mil quinientos pesos y un 3.6 por ciento de comerciantes con ingresos de 500 a mil pesos. En el caso de los adolescentes, sus ingresos resultaron los más bajos del estudio; el nivel medio de ingresos, lo obtienen los comerciantes informales entre 23 y 28 años.

#### CONCLUSIONES

Después de realizar un análisis de la situación de los comerciantes informales y del desarrollo que han tenido este tipo de actividades, a través de documentos y entrevistas con los responsables del área de Comercio Informal que depende de la Dirección de Comercio Municipal de Ciudad Juárez; los resultados obtenidos por el instrumento de recolección de información aplicado a los comercios informales de Juárez, las conclusiones relativas al primer objetivo específico de la investigación fueron las siguientes: Debido a la crisis económica que inicia en el año 2007, y al aumento de comercios que sufren los embates de la inseguridad a través de extorsiones en los propios establecimientos, los comerciantes del ramo abarrotero sacaron a las calles sus productos con la finalidad de continuar en sus actividades comerciales, tratando de no ser ubicados por los extorsionadores en un establecimiento fijo.

Las consecuencias que resultaron de esta estrategia de los abarroteros, fue que se eliminó la recaudación de impuestos que anteriormente generaban estos establecimientos. Ante esta situación de la pérdida de la recaudación de impuestos, el Municipio de Juárez, decide apoyar a dichos comerciantes para que continúen laborando, pero ahora desde la informalidad; el único requisito que solicitan las autoridades Municipales es el pago del permiso que expide a través de la Dirección de Comercio Municipal. Actualmente, el Municipio de Juárez emite un permiso provisional para los comerciantes informales que tiene un costo de 154.00 pesos; manifiesta el funcionario que existen algunas personas, sobre todo las de la tercera edad, que no pueden pagar el costo del permiso; en estos casos, el Municipio otorga un permiso para que laboren 15 días sin cubrir el costo del mismo. La Dirección de Comercio Municipal en Ciudad

Juárez, caracteriza a los comerciantes informales, como personas que buscan el sustento diario ofreciendo un producto o servicios personales tratando de hacerlo de una forma legal; como lo señala Ramos (2006), quien caracteriza a la economía informal como: los individuos que buscan obtener un ingreso por vías legales y distintas al desempeño de una actividad económica y que caben en lo que se conoce como estrategias de supervivencia. Todos los establecimientos que no cumplen con permisos para laborar, los establecimientos que ofrecen alimentos elaborados en el hogar, o en el mismo lugar donde son ofrecidos al público, todo el establecimiento que no cuente con el título de propiedad que comprenda el área de venta, así mismo, todos los vendedores ambulantes a pie y de casa en casa.

Los comerciantes que ofrezcan sus productos o servicios en su propio vehículo, y que el mismo no sea el apropiado para tal efecto. Aunque algunas de las características son propias de las características propuestas por los organismos internacionales, la Dirección de Comercio no cuenta con una estructura o un diagrama fundamentado en las características utilizadas por organismos nacionales o internacionales. De acuerdo a la información recabada en la Dirección de Comercio Municipal, y de la revisión y análisis de los formatos utilizados por los inspectores de la dependencia, se concluye que la clasificación utilizada por dicha dependencia es la siguiente: En el caso de los establecimientos, existen los fijos y semifijos. Para los comerciantes ambulantes, existen tres tipos: Ambulante (A) son los ambulantes de a pie, incluye a los vendedores que visitan los mercados informales así como los de cruceros y vendedores casa por casa. Ambulantes (B) ambulantes que utilizan vehículo ligero como triciclo, carro de madera o metálico.

Ambulantes (C), son los comerciantes que utilizan vehículo de motor para ofrecer sus productos o servicios. La clasificación aportada por la Dirección de Comercio, es una clasificación exclusiva del Departamento de Comercio Informal para definir el tipo de vendedores y el tipo de permiso que debe pagar. Esta clasificación no utiliza ninguna corriente de pensamiento; sin embargo se debe reconocer que, aunque un tanto débil, existe un enfoque Institucional-legal y un marcado enfoque de Comercio informal de Subsistencia; esto, por el apoyo que se les da a los comerciantes informales notoriamente más desprotegidos. En la revisión y análisis de las características y ubicación de los mercados informales de Ciudad Juárez, se llegó a las siguientes conclusiones:

Según las estadísticas de la Dirección de Comercio Municipal, en cuanto a los mercados informales, se tienen detectados 122 mercados informales en la ciudad( sin contar los que están en formación); de estos mercados, los de mayor número de establecimientos y de mayor afluencia de vendedores ambulantes y clientes, se encuentran los mercados: el mercado Victoria de Zaragoza, el mercado Talamas Camandari, El Pozo (Carlos Amaya y Tetzales), mercado Guillermo Prieto y el mercado Miguel de la Madrid. Aunque casi todos los mercados más numerosos están ubicados al sur oriente de la ciudad, la mayoría del total, están dispersos entre el centro, oriente y el poniente de Juárez.

La Dirección de Comercio Municipal, inicia labores en el año 2011, con un padrón de 15,700 comerciantes informales, de los cuales un 255 se han dado de baja debido a los problemas de inseguridad. Sin embargo, del mes de diciembre (2010), se han registrado 67 nuevos comerciantes informales y más de 40 ambulantes. Los mercados informales están ubicados en colonias de estratos sociales bajos y con problemas de inseguridad; aunque algunos de los comerciantes poseen establecimientos fijos, con estructura metálica o madera, la gran mayoría solo poseen un espacio de terreno, el que acondicionan con una manta o plástico para cubrirse de las inclemencias del tiempo, no cuentan con ningún tipo de servicio, ni seguridad por parte de la policía municipal. Sin embargo, señala la Dirección de Comercio, que los informales que logran mejores ingresos son los que están ubicados dentro de los mercados, esto en comparación con los segunderos que operan fuera de los mercados o inclusive en el exterior de sus hogares, en los cuales, se dan casos, que en algunos días no obtienen ninguna ganancia.

No tienen un horario de trabajo extenuante y la mayoría atiende su establecimiento los fines de semana.En cuanto a la antigüedad que presentan, es notorio el crecimiento en el sector en los últimos tres

años, por la cantidad de personas que perdieron su empleo por causas como el despido o por el cierre de negocios. Los comerciantes de los mercados informales, se agrupan en asociaciones de comerciantes, con el fin de protegerse de los delincuentes; así mismo, algunos de ellos participan de actividades de partidos políticos.La media en la edad de los comerciantes está por arriba de los 25 años, son pocos los menores de edad dedicados a esta actividad, y los que se encuentran laborando, el negocio es de tipo familiar. Se encontró un número mayor de mujeres laborando en la informalidad, esto debido a la pérdida de empleos en el sector maquilador en los últimos tres años. Es importante reconocer que los comerciantes informales se encuentran con un nivel de escolaridad entre secundaria y preparatoria; aunque se encontraron pocos comerciantes con nivel universitario, no deja de ser importante señalar que el número de universitarios detectados en el sector informal se encuentra a la alza.

Según los resultados del estudio, cada comerciante informal tiene por lo menos dos dependientes y sus ingresos fluctúan de mil a mil quinientos pesos, para su manutención. Así mismo, la mayoría de los comerciantes no cuenta con seguro médico; los menos, son atendidos a través del Seguro Popular. El comercio informal en Ciudad Juárez Chihuahua se encuentra en los parámetros de una clasificación con un enfoque Institucional-legal, debido a que los comerciantes informales son personas que consideran, que la formalidad como la informalidad traen consigo una excesiva carga normativa y que los costos de permanencia en la formalidad son demasiado altos en tiempo y costos; así también, poseen características del comercio informal de subsistencia, porque son sujetos con bajos recursos, sin acceso al crédito, que encuentran en la economía informal, por el momento, su única alternativa de empleo.

Por otro lado, aunque el comercio informal presenta características similares a las propuestas por organismos internacionales, es importante remarcar que los comerciantes informales se encuentran en un nivel educativo de secundaria, y un considerable porcentaje de estos, tiene estudios de nivel preparatoria; debido a lo anterior, el autor del estudio disiente de Freije (2000) quien señala "los trabajadores que tienen mayores probabilidades de ingresar al sector informal son aquellos con menos experiencia y educación. El comercio informal, es un trabajo precario; son trabajadores independientes que comercian con productos básicos como los alimentos o prestan algún servicio personal en el hogar. Tienen a familiares trabajando en el establecimiento, sin un salario o compensación, además de carecer de servicio médico.

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# EL COMERCIO INTRAINDUSTRIAL EN LA RELACIÓN MÉXICO-CANADÁ

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### RESUMEN

Tras la apertura comercial vivida en México, muchas han sido las opiniones en torno a los efectos benéficos o negativos de este proceso en la economía nacional. La teoría nos indica que cuando un país incursiona en el proceso de libre comercio y ampliación de los mercados los niveles de bienestar se ven incrementados en la población. También fundamenta lo anterior en que la industria entra en un proceso de convergencia entre los países socios (esencialmente con los más cercanos como sería el caso de Canadá y Estados Unidos de Norteamérica), lo que conlleva a un incremento en la participación del libre comercio de las mismas. Es de esperar que los flujos comerciales interindustriales incrementen, así como aquellos que se generan dentro de los intercambios comerciales entre empresas del mismo ramo, también conocido como comercio intraindustrial, y este debe ser el caso para la relación comercial entre México y Canadá.

PALABRAS CLAVE: Comercio Intraindustrial, Relaciones Comerciales, Indicador y Comercio.

## INTRA-INDUSTRY TRADE IN THE RELATIONSHIP MÉXICO-CANADA

### ABSTRACT

After the trade opening lived in Mexico, there have been many opinions on the beneficial or negative effects of this process in the national economy. The theory tells us that when a country goes into the process of free trade and market expansion levels of welfare are increased in the population. Also based the above in that the industry enters a process of convergence between the partner countries (essentially with those closest to it would be the case in Canada and United States of America), this leads to an increase in the participation of the free trade of the same. It is hoped that the interindustry trade flows increase, as well as those that are generated within the trade between companies in the same industry, also known as intra-industry trade, and this must be the case for the commercial relationship between Mexico and Canada.

**JEL:** C43, F10, F14, F15, Q56

**KEYWORDS:** Intra-Industry Trade, Commercial Relationships, Indicator and Trade.

## INTRODUCCIÓN

De conformidad con la Teoría del Comercio internacional, el llamado comercio interindustrial se ve incrementado con la incursión de los distintos sectores de una economía en los intercambios internacionales. También se argumenta que el comercio entre las empresas pertenecientes al mismo sector también tiende a incrementarse llevando al aumento del llamado comercio intraindustrial. El presente estudio busca demostrar que tras catorce años de la apertura vivida en México, el comercio intraindustrial ha tomado un sitio importante para explicar gran parte de los intercambios comerciales que se gestan entre las industrias del país, y como un indicador de la convergencia que viven estos sectores industriales

en la actualidad con nuestro segundo socio comercial Canadá. El análisis girara en torno al Índice de Comercio Intraindustrial que permitirá saber con exactitud en qué cuantía ha ido incrementando a lo largo del tiempo tras la apertura de los mercados nacionales en 1994, los intercambios comerciales dentro de las principales industrias del país con sus contraparte extranjera en Canadá que pertenecen a la misma industria. Es de esperar que la teoría se sustente en un incremento del comercio intraindustrial y con esto dejar de manifiesto que México participa activamente de los procesos de fragmentación de los proceso productivos de las empresas, que es la práctica que rige y caracteriza a la Nueva División Internacional del trabajo contemporánea. Un índice de comercio intraindustrial alto en la relación México-Canadá nos habla de una mayor concentración del comercio entre industrias semejantes y de un proceso de globalización que se encamina de conformidad con la teoría económica.

Por otra parte un índice de comercio intraindustrial bajo es clara señal de la poca interdependencia de las industrias con los socios comerciales del país, y de un proceso de divergencia del sector industrial. El estudio permitirá evaluar el grado de participación de las industrias nacionales en los procesos de integración económica en los que el país se encuentra inmerso hoy día con uno de sus principales socios comerciales desde los procesos de apertura como es Canadá.

## **REVISIÓN LITERARIA**

Después de los colapsos económicos vividos en el país durante el lapso que abarcaron las crisis recurrentes sexenales (1976, 1982, 1988), y de la "brillante" respuesta del Gobierno Mexicano de estatizar la banca en 1982 como mecanismo para hacer frente a la gran macro devaluación y elevados volúmenes de capitales golondrinos generados en la crisis de la deuda. El Gobierno integra al país a la dinámica moderna de la economía apoyada en el libre mercado, buscando a su vez dar cumplimiento a los acuerdos pactados por las cartas de intención firmadas ante el FMI para hacer frente a la deuda, decidiendo dar marcha atrás a su estrategia de estatización, reprivatizando la banca y el sector financiero en su conjunto en 1988, así como una apertura sin precedente de los mercados nacionales (Ruiz 2004).

Este proceso liberalizador continúo y se asentó aún más con la firma y entrada en vigor del TLCAN, hubo quien sostuvo que como consecuencia de este tratado, se incrementaría la eficiencia de los distintos sectores (sobre todo del exportador) y por tanto, se vería una disminución en los costos de intermediación en México. Además que se tendría el plus de una gama nueva de productos y servicios en los distintos sectores en beneficio del sistema en su conjunto y por ende de los usuarios de los mismos (Carstens 1993). El movimiento de ideas, capital, tecnología y personas a través de las fronteras, conlleva a la integración de países, y que es signo de un entorno cada vez más globalizado. Se puede detectar también procesos de integración entre países de determinadas regiones, que se puede leer como signos de regionalización. Dentro de este proceso de regionalización se desarrollan bloques a nivel mundial, estos constituyen una "triada" conformada por 3 grandes bloques: El europeo (Unión Europea), El americano (EUA-Canadá) y El asiático, comandado por Japón (Calva 2000).

En un clima donde todo señala hacia la integración como un mecanismo de sobrevivencia en los mercados, surgen las llamadas alianzas estratégicas, estas son acuerdos cooperativos horizontales, dado que surgen entre competidores de la misma industria. Esto da pie a una nueva forma de realizar comercio, esta es, el comercio intrafirma o mejor conocido como comercio intraindustrial y que es el que se lleva a cabo entre empresas que pertenecen a la misma industria pero que se encuentran en diferentes naciones (Grubel y Lloyd 1975). Estas nuevas tendencias nos permiten comprender que el comercio tanto interindustrial (el que se realiza entre industrias de los diferentes sectores), como el comercio intraindustrial (el que se realiza entre empresas pertenecientes a la misma industria) se incrementarán entre más este inmerso el país en el proceso de apertura comercial (Krugman y Obstfeld 1999).

#### METODOLOGÍA

En esta investigación se pondrá especial atención al comercio intraindustrial, dado que a mayor apertura comercial se esperaría de conformidad con la teoría del comercio internacional un incremento en este tipo de comercio, y siendo México uno de los países en Latinoamérica más inmersos en los procesos de globalización e integración económica es de esperar que el comportamiento de dicho comercio fuera en crecimiento en los últimos años.

Este comercio suele medirse a través del llamado Índice de Comercio Intraindustrial (T):

$$T = 1 - \frac{|X - M|}{(X + M)} \tag{1}$$

Donde, respectivamente X y M representan las exportaciones e importaciones de una industria o grupos de bienes en particular respectivamente, las barras verticales en el numerador de la ecuación denotan el valor absoluto. El valor de T fluctúa entre 0 y 1 (0 al 100%), si T = 0 se puede decir que es cuando el país sólo exporta o importa el bien en particular (lo que denota que no existe comercio intraindustrial), si T = 1 se puede afirmar que este país tiene su comercio intraindustrial en su punto máximo (Grubel y Lloyd 1975). Este tipo de indicador presenta algunas limitaciones como que en algunas ocasiones se presentan mediciones un poco distintas de conformidad de la manera en que se agrupan o definan la industria o el grupo de productos. Por ejemplo, entre mayor sea la amplitud con que se defina una industria, la probabilidad de que dicho país exporte alguna variedad de dicho producto de forma diferenciada e importe otras será mayor. A pesar de esto este índice es una herramienta de gran utilidad para medir las diferencias en el comercio intraindustrial en las diferentes industrias y los cambios en las mismas en el tiempo (Krugman y Obstfeld 1999, Salvatore 1994).

Para este estudio se tomaron datos provenientes de la Base de Datos de las Naciones Unidas (COMTRADE) de los informes de México con sus principales socios, para este análisis se ha decidido trabajar con los datos del comercio con Canadá por ser el Tratado de Libre Comercio más antiguo que nos permita medir la evolución del comercio en el periodo 1994-2007. Se han agrupado las principales industrias en base al Sistema Armonizado, destacando para el análisis las siguientes Industrias: Industria alimentaria, minerales, industria química, plásticos, cueros y pieles, materias textiles, calzado y sombreros, metales y sus manufacturas, aparatos mecánicos y material de transporte.

#### RESULTADOS

Tras la firma del Tratado de Libre Comercio de América del Norte (TLCAN) y su entrada en vigor en 1994, mucho se ha valorado la pertinencia del mismo y los efectos que este ha tenido en el crecimiento del comercio en el país. Al determinar el índice de comercio intraindustrial para la relación México-Canadá se pueden encontrar datos interesantes.Por ejemplo en la Tabla 1 se puede observar la evolución que ha tenido el comercio intraindustrial en la industria alimentaria, las relaciones de intercambio dentro de la misma industria alimentaria ha ido en claro aumento pasando de tener un grado de integración de 35% en 1994 a un 84% para el año 2007.

En cuanto a la industria Minera (Tabla 2), el comercio intraindustrial al interior de la misma ha mantenido un ritmo de crecimiento descendente oscilando de un 98% en 1994 a un 39% para 2007, por lo que podemos decir que el comercio con caracteristicas intraindustriales en este sector es bajo, debido principalmente que si bien los niveles de intercambio en lo que a productos mineros se refiere es considerable, las relaciones de ayuda entre las firmas del sector ha ido disminuyendo al volverse el mercado más competitivo.

Tabla 1: Índice de Comercio Intraindustrial dentro de la Industria Alimentaria para Mex-Can-EUA (1994-2007)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ICII AN	77%	79%	80%	79%	79%	79%	79%	87%	83%	85%	84%	83%	78%	84%
ICII USA	78%	78%	79%	79%	79%	79%	78%	86%	82%	84%	83%	82%	77%	84%
ICII CAN	35%	93%	99%	69%	75%	96%	88%	94%	90%	74%	78%	83%	90%	83%

La tabla muestra los indices de comercio intraindustrial calculados para la industria de los alimentos en el periodo comprendido de 1994 a 2007, siendo ICII AN el indicador para el comercio intraindustrial entre las empresas pertenecientes a la misma industria en América del Norte, ICII USA entre empresas mexicanas y Americanas y las ICII CAN entre las empresas mexicanas y las canadienses, los valores cercanos al 100% nos indica un comercio intraindustrial muy activo mientras que los cercanos a 0 son clara señal de un comercio intraindustrial incipiente. Elaboración Propia con datos de la COMTRADE UN 2011.

Tabla 2: Índice de Come	ercio Intraindustrial dentro	de la Industria Minera	para Mex-Can-EUA (1994-
2007)			

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ICII AN	39%	37%	31%	44%	57%	48%	51%	61%	49%	49%	48%	50%	45%	49%
ICII USA	38%	36%	31%	44%	58%	48%	52%	61%	49%	50%	48%	50%	45%	49%
ICII CAN	100%	90%	55%	49%	55%	34%	33%	35%	45%	34%	54%	48%	50%	36%

La tabla muestra los indices de comercio intraindustrial calculados para la industria minera en el periodo comprendido de 1994 a 2007, siendo ICII AN el indicador para el comercio intraindustrial entre las empresas pertenecientes a la misma industria en América del Norte, ICII USA entre empresas mexicanas y Americanas y las ICII CAN entre las empresas mexicanas y las canadienses, los valores cercanos al 100% nos indica un comercio intraindustrial muy activo mientras que los cercanos a 0 son clara señal de un comercio intraindustrial incipiente. Elaboración Propia con datos de la COMTRADE UN 2011.

En la industria química (Tabla 3) denotamos un fenómeno interesante a todas luces, nos referimos al incremento del intercambio entre las empresas pertenecientes a este sector, a diferencia de la industria anterior, este sector ha logrado ir poco a poco consolidando sus lazos intraindustriales, pero esto se ha dado de forma gradual y por demás moderada llevando al índice de 32 % en 1994 a un 61% en 2007.

Tabla 3: Índice de Comercio Intraindustrial dentro de la Industria Química para Mex-Can (1994-2007)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ICII AN	50%	65%	54%	52%	52%	54%	50%	47%	47%	44%	43%	45%	45%	41%
ICII CAN	34%	67%	42%	60%	61%	65%	55%	62%	69%	71%	55%	75%	78%	61%

La tabla muestra los indices de comercio intraindustrial calculados para la industria Química en el periodo comprendido de 1994 a 2007, siendo ICII AN el indicador para el comercio intraindustrial entre las empresas pertenecientes a la misma industria en América del Norte y las ICII CAN entre las empresas mexicanas y las canadienses, los valores cercanos al 100% nos indica un comercio intraindustrial muy activo mientras que los cercanos a 0 son clara señal de un comercio intraindustrial incipiente. Elaboración Propia con datos de la COMTRADE UN 2011.

La industria del Plástico parece no sufrir ningún cambio en cuanto a los intercambios entre las empresas del mismo sector, el crecimiento es nulo llevando al índice de 22% a un 26% a lo largo del periodo de análisis, curiosamente se puede leer que producto de los acontecimientos del 9-11 para el año 2001, esta industria aún dentro de la zona de libre comercio de América del Norte si reciente en sus intercambios a nivel intracomercial como se aprecia en la Tabla 4.

Tabla 4: Índice de Comercio Intraindustrial dentro de la Industria del Plástico para Mex-Can-EUA (1994-2007)

94 1	<b>995</b> 1	996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
			42%	41%	43%			43%	44%	50%	51%	50%	51% 52%
													27%
5	% 4 % 4	% 49% % 49%	% 49% 43% % 49% 43%	% 49% 43% 42% % 49% 43% 42%	% 49% 43% 42% 41% % 49% 43% 42% 42%	% 49% 43% 42% 41% 43% % 49% 43% 42% 42% 44%	%         49%         43%         42%         41%         43%         45%           %         49%         43%         42%         42%         44%         46%	%         49%         43%         42%         41%         43%         45%         44%           %         49%         43%         42%         42%         44%         46%         44%	%         49%         43%         42%         41%         43%         45%         44%         43%           %         49%         43%         42%         42%         44%         46%         44%         44%	%         49%         43%         42%         41%         43%         45%         44%         43%         44%           %         49%         43%         42%         42%         44%         46%         44%         44%         45%	%       49%       43%       42%       41%       43%       45%       44%       43%       44%       50%         %       49%       43%       42%       42%       44%       46%       44%       44%       45%       50%	%       49%       43%       42%       41%       43%       45%       44%       43%       44%       50%       51%         %       49%       43%       42%       42%       44%       46%       44%       44%       45%       50%       51%	%         49%         43%         42%         41%         43%         45%         44%         43%         44%         50%         51%         50%           %         49%         43%         42%         42%         44%         46%         44%         44%         45%         50%         51%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%         50%         52%         50%

La tabla muestra los indices de comercio intraindustrial calculados para la industria del Plástico en el periodo comprendido de 1994 a 2007, siendo ICII AN el indicador para el comercio intraindustrial entre las empresas pertenecientes a la misma industria en América del Norte, ICII USA entre empresas mexicanas y Americanas y las ICII CAN entre las empresas mexicanas y las canadienses, los valores cercanos al 100% nos indica un comercio intraindustrial muy activo mientras que los cercanos a 0 son clara señal de un comercio intraindustrial incipiente. Elaboración Propia con datos de la COMTRADE UN 2011.

La industria de la piel después de registrar un decrecimiento considerable que llevo al indice de intercambio intraindustria de un 98% en 1998 a un 30% en 2000, ha registrado un considerable repunte en el último año oscilando el indice en los 97% lo que nos indica que es una industria muy integrada, pero que le impactan los altibajos de los mercados vinculados a dicho sector (Tabla 5).

Tabla 5: Índice de Comercio Intraindustrial dentro de la Industria de la Piel para Mex-Can (1994-2007)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ICII AN ICII	83%	94%	78%	75%	75%	75%	78%	69%	64%	64%	56%	66%	81%	97%
CAN	77%	96%	66%	65%	95%	36%	29%	44%	53%	70%	93%	77%	50%	92%

La tabla muestra los indices de comercio intraindustrial calculados para la industria de la piel en el periodo comprendido de 1994 a 2007, siendo ICII AN el indicador para el comercio intraindustrial entre las empresas pertenecientes a la misma industria en América del Norte y las ICII CAN entre las empresas mexicanas y las canadienses, los valores cercanos al 100% nos indica un comercio intraindustrial muy activo mientras que los cercanos a 0 son clara señal de un comercio intraindustrial incipiente. Elaboración Propia con datos de la COMTRADE UN 2011.

La industria textil (Tabla 6) por su parte ha sufrido debido a la aplicación de políticas de mayor apertura a la competitividad de la misma, lo que llevo al indice de ocupar un 99% de integración en 1994 a una caída hasta de 60% en el año 1997, a pesar de esto desde 2000 se ha recuperado hasta oscilar en 90% del comercio intraindustrial, siendo una de las industrias mas integradas en este aspecto.

Tabla 6: Índice de Comercio Intraindustrial dentro de la Industria Textil para Mex-Can-EUA (1994-2007)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ICII AN	87%	95%	95%	90%	91%	90%	89%	91%	88%	85%	83%	80%	83%	86%
ICII USA	87%	95%	95%	90%	91%	90%	89%	91%	88%	85%	82%	80%	83%	86%
ICII CAN	100%	77%	69%	62%	63%	83%	99%	90%	90%	98%	95%	94%	95%	91%

La tabla muestra los indices de comercio intraindustrial calculados para la industria Textil en el periodo comprendido de 1994 a 2007, siendo ICII AN el indicador para el comercio intraindustrial entre las empresas pertenecientes a la misma industria en América del Norte, ICII USA entre empresas mexicanas y Americanas y las ICII CAN entre las empresas mexicanas y las canadienses, los valores cercanos al 100% nos indica un comercio intraindustrial muy activo mientras que los cercanos a 0 son clara señal de un comercio intraindustrial incipiente. Elaboración Propia con datos de la COMTRADE UN 2011.

En la industria del calzado (Tabla 7) el comportamiento del comercio intraindustrial ha ido en clara caida, lo que indica que las relaciones entre las empresas del mismo ramo es cada vez menor entre estos dos países miembros del TLCAN, este ha caído de cerca del 40% que representó en 1994 hasta un 5% en 1997, aunque de 1998 a 2007 ha alcanzado un nivel cercano al 60%.

Tabla 7: Índice de Comercio Intraindustrial dentro de la Industria del Calzado para Mex-Can (1994-2007)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ICII														
AN	57%	44%	33%	35%	37%	36%	35%	43%	33%	28%	24%	19%	22%	25%
ICII														
CAN	43%	22%	11%	6%	6%	8%	19%	28%	61%	45%	48%	59%	57%	58%

La tabla muestra los indices de comercio intraindustrial calculados para la industria del calzado en el periodo comprendido de 1994 a 2007, siendo ICII AN el indicador para el comercio intraindustrial entre las empresas pertenecientes a la misma industria en América del Norte, y las ICII CAN entre las empresas mexicanas y las canadienses, los valores cercanos al 100% nos indica un comercio intraindustrial muy activo mientras que los cercanos a 0 son clara señal de un comercio intraindustrial incipiente. Elaboración Propia con datos de la COMTRADE UN 2011.

En la industria de los metales este se ha mantenido a la baja en el periodo, lo que nos indica una integración muy pobre en el sector, pasando de 40 % en 1994, habiendo llegado a cerca del 80% en 1997

hasta un 20% en 2007, esto principalmente por la participación tan fuerte en este rubro del principal socio comercial de México (EUA).

Tabla 8: Índice de Comercio Intraindustrial dentro de la Industria de los Metales para Mex-Can-EUA (1994-2007)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ICII														
AN	72%	84%	78%	78%	76%	69%	70%	77%	81%	76%	82%	83%	82%	82%
ICII														
USA	73%	85%	78%	78%	76%	69%	71%	78%	83%	78%	85%	86%	85%	85%
ICII														
CAN	40%	72%	46%	77%	63%	35%	31%	34%	36%	34%	27%	23%	14%	19%

La tabla muestra los indices de comercio intraindustrial calculados para la industria de los metales en el periodo comprendido de 1994 a 2007, siendo ICII AN el indicador para el comercio intraindustrial entre las empresas pertenecientes a la misma industria en América del Norte, ICII USA entre empresas mexicanas y Americanas y las ICII CAN entre las empresas mexicanas y las canadienses, los valores cercanos al 100% nos indica un comercio intraindustrial muy activo mientras que los cercanos a 0 son clara señal de un comercio intraindustrial incipiente. Elaboración Propia con datos de la COMTRADE UN 2011.

El mayor caso de éxito en cuanto a integración intraindustrial se refiere es es de la industria eléctrica y de aparatos eléctrico, boilers, y herramientas de este tipo, ya que se ha mantenido de un 78% que representaban en 1994 hasta un 80% que representó en 2007, lo que claramente nos indica una integración entre las empresas de este sector.

En la industria de los materiales vinculados al transporte este reporta un cada vez mayor integración entre las empresas del sector, pasando de 40% que representaba en 1994 hasta un 90% en 2007.

Tabla 10: Índice de Comercio Intraindustrial dentro de la Industria de los Materiales de Transporte para Mex-Can-EUA (1994-2007)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ICII														
AN	55%	44%	57%	66%	65%	63%	67%	66%	66%	61%	61%	64%	61%	64%
ICII	c 70 /	100/	500/	(70)	6 40 /	(20)	(70/	( 50 (	(20)	500/	500/	(10/	500/	(10/
USA	57%	46%	59%	67%	64%	62%	67%	65%	62%	59%	59%	61%	58%	61%
ICII	2.50/	100/	2 (0)	400/	000/	0.40/			0.70/	010/	000/	0.00/		000/
CAN	37%	12%	26%	48%	98%	84%	77%	77%	97%	91%	89%	83%	78%	88%

La tabla muestra los indices de comercio intraindustrial calculados para la industria de los materiales de Transporte en el periodo comprendido de 1994 a 2007, siendo ICII AN el indicador para el comercio intraindustrial entre las empresas pertenecientes a la misma industria en América del Norte, ICII USA entre empresas mexicanas y Americanas y las ICII CAN entre las empresas mexicanas y las canadienses, los valores cercanos al 100% nos indica un comercio intraindustrial muy activo mientras que los cercanos a 0 son clara señal de un comercio intraindustrial incipiente. Elaboración Propia con datos de la COMTRADE UN 2011.

#### CONCLUSIONES

Como se ha mencionado,los procesos de integración generan una variedad de cambios en los sectores económicos de los países que se incertan en los procesos de apertura comercial, es de esperarse que dichos cambios permitan a las empresas participantes de estos mercados cada vez más competitivos, entablar relaciones estratégicas a nivel comercial con aquellas empresas que le otorgen ventajas a la hora de competir.De conformidad con la teoria del comercio internacional algunas de las principales industrias en la relación comercial entre México y Canadá han seguido con el proceso de integración a través de relaciones de comercio intraindustrial que a lo largo del periodo comprendido entre 1994 y 2007 se ha ido fortaleciendo; pero notamos a su vez, que en otros estas relaciones se han deteriorado,lo que nos lleva a meditar cuales pudiesen ser las principales causas de dicho fenómeno.

Ya sea que este tipo de comercio intraindustrial ha cedido en torno a incrementos en flujos comerciales provenientes del comercio interindustrial o bien sea derivado de politicas de fortalecimiento de cadenas de valor al interior de los mismo países. Tenemos por otra parte los impactos de algunas variables de

índole exógeno como son la guerra contra el terrorismo global y el endurecimiento de las barreras no arancelarias en vías de la seguridad de las naciones, que de una u otra forma impactan los flujos comerciales entre nuestras economías. Sin embargo como se pudo apreciar aquellas industrias como las de componentes eléctricos, energéticos y de herramientas y componentes de transportes son clara muestra que se pueden formar cadenas de valor cimentadas en las transacciones intraindustria.

Por otra parte, es importante no dejar de lado las consecuencias reflejadas ya en las estadisticas del impacto de la recesión económica que actualmente se vive, pero con todo esto no se puede negar el impacto que ha representado el libre comercio en América del Norte para las relaciones de carácter intraindustrial y las tendencias de integración y convergencia en esta parte del hemisferio.

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# ANÁLISIS DE LA GESTIÓN DE LOS RECURSOS HUMANOS QUE APLICAN LAS PEQUEÑAS Y MEDIANAS EMPRESAS DE SERVICIO

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### RESUMEN

La práctica de gestión de los recursos humanos hoy en día es uno de los factores más importantes en toda empresa, ya que de ello dependerá la productividad de la empresa si se ha llevado a cabo un buen proceso de reclutamiento, selección y sobre todo de capacitación, ante el uso de las nuevas tecnologías. El objetivo del presente trabajo es identificar si se lleva a cabo un buen proceso de reclutamiento, selección, inducción, capacitación y desarrollo de los mismos en las empresas de servicios. Se pretende analizar si dichas empresas lo aplican. Con esto se podrá identificar los puntos que diferencian el proceso que aplican las mismas y lo que marcan las teorías del proceso de recursos humanos. La metodología utilizada en el presente estudio fue por medio de aplicación de cuestionarios, recopilándose la información necesaria a partir de una fuente primaria recabada directamente de la muestra de pequeñas y medianas empresas de servicios de la ciudad de Tecomán, Colima, México. La técnica estadística para representar los resultados fue a través de la aplicación de un análisis factorial de componentes principales para determinar las variables independientes y la dependiente. Y para la comprobación de resultados se realizó un análisis de regresión par determinar la influencia de las variables independientes, reclutamiento, selección, inducción y capacitación con la variable dependiente gestión de recursos humanos. Los principales hallazgos del estudio encontrados es que las pequeñas y medianas empresas de servicios fueron la influencia significativa de dos variables independientes inducción y selección con la gestión de recursos humanos, no así la capacitación y reclutamiento que no tuvieron una relación significativa con la variable dependiente gestión de recursos humanos, lo que significa que estas dos prácticas no las llevan a cabo las pequeñas y medianas empresas de esta ciudad.

PALABRAS CLAVE: Reclutamiento, selección, capacitación e inducción.

### ABSTRACT

The practice of the management of human resources nowadays is one of the most important factors in businesses, because productivity of the enterprise will depend on this; if it's been carried out a good recruitment, selection and specially training process, considering the use of technologies. The purpose of this work is to identify whether it's carried out a good development process of recruitment, selection, induction and training in the service businesses. It's aimed to analyze whether the mentioned processes are applied by the enterprises. Thus, it will be able to identify the aspects that differentiate between the process that is applied by the enterprises and what is pointed by theories of human resources process. The methodology of this work was through the application of questionnaires, compiling the necessary information from a primary source, obtained directly from a sample of small and medium enterprises of service in the city of Tecomán, in the state of Colima, Mexico. The statistical technique to represent the results was a factorial analysis of the main components to determinate the dependent and independent variables. Regarding the testing of the results, a regression analysis was done to determinate the influence of independent variables "recruitment", "selection", "induction" and "training" on the dependent variable "management of human resources".

**KEY WORDS:** Recruitment, selection, training and induction

### INTRODUCCIÓN

Es de reconocer que para el buen funcionamiento de una empresa debe tener una estructura adecuada en su organización, desde el nivel más bajo hasta el nivel directivo. Se sabe también que hay tres elementos importantes que una entidad económica debe tener, los recursos materiales, financieros y humanos. Los recursos materiales son los bienes tangibles con los que cuenta la empresa con estos ofrece un mejor servicio a sus clientes y en el menor tiempo posible. Los recursos financieros son los recursos con los que cuenta la empresa ya sean propios o ajenos y que son parte fundamental para el buen funcionamiento y desarrollo de la empresa. Los recursos humanos son el motor de la empresa y sin ellos no existiría un buen manejo y funcionamiento de los demás recursos.

Para Dessler (2009), en la administración de recursos humanos se deben llevar cuatro etapas que marca el proceso administrativo como son: Planeación, organización integración, dirección y control de los recursos humanos. En la planeación, las empresas establecerán metas a corto, mediano o largo plazo, así como normas que deberán llevar a cabo dentro de la misma. En la organización, cada uno de los subordinados tendrá una tarea en específica para que la realicen lo mejor posible, deber existir la departamentalización y cada uno tendrá una función, delegar las funciones que les corresponde a cada uno y sin olvidar la coordinación del trabajo de los subordinados. En la integración, se debe tomar en cuenta el proceso de reclutamiento de personal. En esta etapa el encargado de contratar a la persona debe reunir los requisitos del puesto, el establecimiento de normas, la remuneración (gratificación por su buen desempeño y realización de sus labores), la capacitación, que cuando menos debe ser una vez al año.

En la dirección, trata de verificar que cada uno de los subordinados realice bien sus funciones, mantener un buen ambiente laboral para que el trabajador se sienta seguro de lo que está haciendo y buscar un tipo de estímulo para que la persona no sienta tanta presión en el trabajo. En el control, se encarga principalmente de observar que todas las actividades se estén realizando, tal como deben ser y por medio del cual se evalúa el rendimiento, e compara el desempeño real con los estándares y e aplican las medidas correctivas necesarias. En este trabajo se abordan los pasos anteriores que realizan las pequeñas empresas de servicio, con el fin de corroborar si se lleva a cabo este proceso, describiendo la importancia de la aplicación de la gestión de los recursos humanos. Según Alles, (2009), "la gestión de los recursos humanos comienza por la puesta en práctica de los subsistemas", esos subsistemas son: Análisis y descripción de puestos; Atracción selección e incorporación; Evaluación del desempeño; Remuneraciones y beneficios; Desarrollo y planes de sucesión; Formación Pregunta de investigación Después de haber revisado y analizado los problemas con las que cuentan las pymes y debido a los argumentos vertidos en los puntos anteriores se plantea la siguiente pregunta de investigación: ¿Las pymes de servicio de la ciudad de Tecomán, Colima México, llevan a cabo el proceso de personal de acuerdo a lo que marcan las teorías sobre gestión de recursos humanos?.

### Objeto De Estudio

La gestión de recursos humanos es un proceso poco practicado en las empresas de esta ciudad, por lo tanto se analiza, cómo llevan a cabo estas prácticas de recursos humanos. Es por ello que el objeto de estudio es analizar si las empresas de servicios de dicha ciudad mexicana llevan adecuadamente el proceso de gestión de recursos humanos. Es por esto que el objeto de estudio son las pymes de servicios de una la ciudad mexicana antes mencionada, en los aspectos relacionados con la gestión de Recursos Humanos (reclutamiento, selección, capacitación, inducción y desarrollo) para evaluar las técnicas que llevan a cabo.

### **Objetivo General Y Particulares**

El objetivo general del presente estudio es identificar si llevan a cabo, adecuadamente, el proceso de los recursos humanos en las empresas de servicios, como son reclutamiento, selección, inducción, capacitación y desarrollo de sus recursos humanos. Y como objetivos específicos se tienen los siguientes:

a). Elaborar el marco teórico sobre el estudio del proceso de los recursos humanos. b). Describir una a una las prácticas de gestión de los recursos humanos. c). Identificar los problemas que se tienen en las empresas al no aplicarlo según las teorías.

### Marco Teórico

En la actualidad la administración de recursos humanos dejó de ser una actividad marginal secundaria, alejada de los objetivos de la empresa, su tendencia, que se acentuara en el futuro, es en gran parte gracias a las universidades de Europa y América las cuales han concedido a la ciencia administrativa en general y a la administración de personal en particular, hoy en día los altos mandos, como las jefaturas de personal, suelen estar a cargo de personas preparadas académicamente, en este ramo de la administración. Antes de que se lleve el proceso de reclutamiento y selección es necesario que se tome en cuenta que debe existir una **planeación**, no es más que solo saber cuáles puestos debe cubrir la empresa y como cubrirlos. Al tratar de definir cuáles son las vacantes se deben de tomar datos precisos y concretos, para saber que cualidad debe tener las personas, así como las actitudes y aptitudes que debe tener para poder tener un mejor desempeño y que a la empresa no le cueste mucho dinero estarlo capacitando. Por eso en la actualidad las empresas deben de "planear antes de actuar y no actuar y después planear." La planeación de personal debe tener en cuenta que se deben considerar todos y cada uno de los puestos a futuro, ya sea desde el nivel de menor jerarquía (mantenimiento), hasta el de mayor nivel (director general).Hay empresas que denominan a la "planeación de la sucesión" como el proceso por el cual se van a ocupar los puestos de los ejecutivos. (Dessler 2009).

Posteriormente, viene la etapa del reclutamiento, que según Cuervo García (1994), es "el proceso mediante el cual la organización trata de detectar empleos potenciales, que cumplan los requisitos adecuados para realizar un determinado trabajo, atrayéndolos en cantidad suficiente, de modo que sea posible de modo que sea posible una posterior selección de alguno de ellos, en función de la exigencias del trabajo y de las características de los candidatos; teniendo en cuenta que el primer paso para atraer candidatos reside en conocer la empresa y sus necesidades". Las empresas deben prever, de acuerdo con sus planes de expansión y mantener un equilibrio apropiado en su planilla, las posibles bajas, muertes, pensiones, incapacidades, despidos voluntarios o involuntarios o las posibles plazas que se tendrán en un futuro próximo. En el reclutamiento es importante considerar la edad, género, nacionalidad, la ideología, nivel de preparación, experiencia, también considerar el empleo a minusválidos.

La selección de personal es un proceso dinámico, en el cual se busca encontrar a la persona más adecuada (tanto por sus características personales, aptitudes, motivaciones, etc.) para cubrir un puesto de trabajo en alguna entidad determinada (Nebot, 1999). La importancia de este proceso, radica en contar con las mejores expectativas, y por ende con los mejores empleados desempeñando sus actividades dentro de la entidad, las cuales deben tener el personal adecuado en los lugares precisos, es así como por consiguiente, la evaluación de los posibles colaboradores de la organización debe realizarse de una manera secuencial y precisa, analizando la experiencia laboral, su trayectoria académica y los aspectos psicológicos. Nebot (1999) nos señala que: Es un proceso dinámico, en el sentido que es una sucesión de fases que son flexibles y se adaptan a los cambios que van surgiendo.

Su objetivo (o finalidad) es encontrar el candidato más adecuado de acuerdo con unas características de personalidad, aptitudes, formación, experiencia, motivación, intereses fijadas de antemano. Dichos

requisitos o características están determinados en función de las actividades, funciones y tareas y puesto que se trata de cubrir y de las características de la empresa a la que pertenece.

Los métodos secuenciales se recomiendan cuando los gastos de los exámenes son elevados como por ejemplo en las pruebas que exigen aplicación y evaluación individual. Una vez tomada la decisión definitiva de admonición, el candidato debe cumplir con un examen médico así como su verificación de registro personal y profesional (Chiavenato, 2007). La **inducción** de personal es un proceso que proporciona a los nuevos empleados información básica de los antecedentes de la compañía, y en dicho proceso se les dice a los empleados sobre las actitudes, normas, valores y patrones de conducta que son esperados por el patrón. Al introducir a los empleados nuevos en la entidad se les proporciona la información básica de los antecedentes que se requieren para desempeñar tu trabajo de manera correcta. La inducción forma parte del proceso de socialización del empleador para personas nuevas.Un objetivo es algo que se desea lograr, un fin deseado, ya sea particular, parcial o total.

Y en el caso de la inducción el objetivo es proporcionar la información que necesita el nuevo empleado para ayudarlo a adaptarse satisfactoriamente a su trabajo y a llegar a sentirse parte de la organización. Toda organización persigue por lo menos estas tres cosas, lo cual llevaran a tener una buena inducción de personal. 1. Definir las condiciones de trabajo. 2. Familiarizarse detalladamente al empleado con las exigencias de su tarea. 3. Esforzarse por engendrar entre los empleados confianza en la empresa y en sus propias capacidades para realizar el trabajo.

La capacitación es un tema que a las empresas les concierne y a todo aquel trabajador también, ya que al primero por ley está obligado a proporcionar capacitación a sus empleados, y el segundo tiene el derecho a recibirla y de aprovecharla al máximo para el desempeño de sus labores. Dentro de la constitución política de los estados unidos nos señala que "la federación y los estados deben proporcionar capacitación para el trabajo como medio de readaptación social. (Art. 18).

Es el artículo anterior marca que es necesaria la capacitación que la proporcione la federación y los estados. Pero no marca la obligatoriedad para la empresa, es por eso que a continuación proporcionamos la base legal de la capacitación como obligación para la empresa. El art. 123, apartado A, fracción XIII de la Constitución Política de los Estados Unidos Mexicanos establece lo siguiente: "Las empresas cualquiera que sea su actividad, estarán obligadas a proporcionar a sus trabajadores, capacitación o adiestramiento para el trabajo. La ley reglamentaria determinará los sistemas, métodos y procedimientos conforme a los cuales los patrones deberán cumplir dicha obligación".

Ayala Villegas (2004), nos dice es un proceso educacional de carácter estratégico aplicado de manera organizada y sistémica, mediante el cual los colaboradores adquieren o desarrollan conocimientos y habilidades específicas relativas al trabajo, y modifica sus actitudes frente a los quehaceres de la organización, el puesto o el ambiente laboral.

### METODOLOGÍA

El método llevado a cabo en esta investigación fue la investigación de carácter cuantitativo correlacional, el cual ayuda a conocer o a medir el grado de relación que exista entre dos o más conceptos o variables. Su propósito es saber los comportamientos de las variables afectadas (Hernández Sampieri et al, 2010). Por ello interesa observar la manera en que las variables independientes influirán en la dependiente en la obtención de los resultados. La población, objeto de estudio, comprende a los propietarios de pequeñas y medianas empresas del área de servicios que se encuentran en esta ciudad mexicana.

La variable dependiente denominada gestión estuvo integrada por cuatro preguntas que fueron validadas con pruebas que más adelante se especifican. Las independientes fueron: Reclutamiento Selección,

Capacitación e Inducción La población a ser investigada fueron las pequeñas y medianas empresas de servicios, comprende a todos aquellos propietarios de empresas que se encuentran en el área de servicios a investigar ubicadas en esta ciudad mexicana, que realicen procesos de gestión de recursos humanos y que tengan empresas que estén en la clasificación de pequeñas y medianas.

Asimismo, se ha elegido una muestra, la cual consiste en un subgrupo de la población, esto es, una pequeña parte de elementos que pertenecen a ese conjunto que es la población definido en sus características y comprende a los 97 propietarios de pequeñas empresas. Se aplicó un cuestionario a los directivos de las pymes de Tecomán, con el propósito de saber si llevan a cabo el proceso de reclutamiento del personal tal y como marcan las teorías. El total de las empresas era de 2,054, debido a que son un número considerable, nos vimos a la tarea de aplicar una fórmula en la cual el número que se llegó a encuestar fue de 97 y como explicamos anteriormente cuando en una población existe un número grande de empresas es necesario que se tome una muestra de ella. Se procedió a la elaboración de una base de datos para su correcta validación a través del programa estadístico SPSS (Statistical Package for Social Science) versión 17.0. A partir de esta base de datos se obtuvieron los estadísticos descriptivos, la tabulación de las variables del estudio, la elaboración de las medidas de fiabilidad así como la elaboración del análisis de regresión. Posteriormente se continuó con la captura de la información para luego realizar el estudio detallado de la información. Este estudio se realizó durante el año 2012.

### RESULTADOS

A cada variable de esta investigación se le hicieron cuatro pruebas de fiabilidad, así como el análisis factorial para validar las preguntas cuestionadas y determinar las variables tanto la dependiente como las independientes. Las cuatro pruebas de fiabilidad fueron, Alfa de Cronbach, la prueba Kaiser-Meyer-Olkin (KMO), las comunalidades y la varianza.

Variables	Alfa de Cronbach	КМО	Comunalidades	Varianza
Dependiente	.764	.638	De .514 a .795	70.098
Gestión de Recursos Humanos				
Independientes	.799	.751	De .487 a .771	64.26
Reclutamiento				
Selección	.837	.745	De .584 a .842	67.53
Inducción	.952	.934	De .582 a .789	67.62
Capacitación	.953	.923	De .488 a .798	68.41

Tabla 1: Resultados de las pruebas de fiabilidad de las variables.

Fuente: Elaboración propia.

### Análisis De Regresión

Al elaborar el análisis de regresión se obtuvo un  $R^2$  con valor de 0.529 que es un valor interesante por tratarse de un estudio empírico. Los resultados obtenidos a partir de la regresión permiten identificar la capacidad predictiva de las teorías convertidas en variables. La variable 1 se relaciona con la capacitación, la variable 2 con la inducción, la variable 3 con la selección de personal y la variable 4 sobre el reclutamiento de personal, tal como se muestra en la tabla 2.

2: Resultados del análisis de regresión.	

		Coeficientes no	estandarizados	Coeficientes tipificados		
Mod	elo	В	Error típ.	Beta	t	Siq.
1	(Constante)	.024	.053		.446	.656
	Variable indep 1	.123	.110	.123	1.118	.265
	Variable indep 2	.313	.118	.313	2.656	.009
	Variable indep 3	.371	.089	.372	4.173	.000
	Variable indep 4	036	.079	036	460	.646

a. Variable dependiente: Variable dependiente Gestion de RRHH

Fuente: Elaboración propia.

Tabla

Para conocer la influencia que ejercieron las variables independientes, se ha encontrado la existencia de una relación significativa de la variable dependiente gestión de los recursos humanos con las variables independientes 2 que es la inducción y con la 3 que es la selección de personal. Sin embargo las variables 1 que se relaciona con la capacitación y la variable 4 que es el reclutamiento de personal no resultaron tener una relación significativa

### CONCLUSIONES

Para llegar a las conclusiones de este trabajo de investigación realizado con el objetivo de obtener información que ayude, a todo aquel que los consulte a tener una idea clara sobre las técnicas de la gestión de los recursos humanos que aplican las pymes de servicios en esta ciudad.Con relación al objetivo general de la investigación el cual fue "Identificar si el proceso de los recursos humanos en las empresas de servicios lo que es reclutamiento, selección, inducción y capacitación de los RRHH. Así mismo que identificar las diferencias entre lo que aplican las empresas y lo que se debe aplicar de acuerdo a las teorías del proceso de RRHH"Se identificaron cada uno de los procesos de los recursos humanos en las pymes de servicios de Tecomán y el desarrollo de RRHH. En relación a las diferencias se identificó que las pequeñas y medianas empresas de servicios fueron la influencia significativa de dos variables independientes inducción y selección con la gestión de recursos humanos, no así la capacitación y reclutamiento que no tuvieron una relación significativa con la variable dependiente gestión de recursos humanos, lo que significa que estas dos prácticas no las llevan a cabo las pequeñas y medianas empresas de esta ciudad.

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## JUZGADOS ADMINISTRATIVOS MUNICIPALES EN EL **ESTADO DE TAMAULIPAS**

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### **RESUMEN**

A fin de que los ayuntamientos gocen de una verdadera autonomía frente a la federación y a los estados a los que pertenecen, es imprescindible que ellos mismos ejerzan sus facultades de manera directa con las únicas limitaciones previstas en la Constitución Política de los Estados Unidos Mexicanos; no obstante, la realidad muestra un panorama distinto, mismo que los ordenamientos legales estatales vigentes en la mayoría de los entidades federativas del país pasan por alto, desconociendo las atribuciones ya concedidas a los municipios por la carta magna y arrogándose las mismas en su provecho, impidiendo con ello la creación de órganos jurisdiccionales municipales, que por disposición de la Constitución deben instaurarse a la brevedad posible. El objetivo de este trabajo es desentrañar las razones por las cuales interpretó nuestro órgano legislativo tamaulipeco de forma equivocada al artículo 115, fracción II, inciso a) de la Constitución Política de los Estados Unidos Mexicanos, publicada en el Diario Oficial de la Federación en fecha 23 de Diciembre de 1999, lo que impidió la instauración de los tribunales contenciosos administrativos municipales, y como consecuencia de ello, el desarrollo y crecimiento de los entes públicos denominados municipios. Como conclusión se puede llegar a la firme convicción de que una vez realizada la reforma en los términos propuestos, sólo quedaría por instaurar los tribunales contenciosos administrativos municipales en el estado de Tamaulipas, y lograr con esto el verdadero fortalecimiento de los municipios de México, particularmente los de nuestro Estado, para ser coherentes con la intención del legislador federal, en su reforma al artículo 115 constitucional de 23 de Diciembre de 1999.

PALABRAS CLAVE: Facultad jurisdiccional, Municipio, juzgados administrativos.

### **MUNICIPAL ADMINISTRATIVE COURTS IN THE STATE OF** TAMAULIPAS

### ABSTRACT

To allow councils to enjoy genuine autonomy, the Federation and the States to which they belong, it is essential that they themselves exercise their powers in a direct way with the only restrictions laid down in the political Constitution of the Mexican United States; However, the reality shows a different, same picture that State legal systems in force in the majority of the federal entities of the country overlooked, unaware of the powers already granted to municipalities by the Constitution, and assuming the same for their benefit, thereby preventing the creation of municipal courts, that provision of the Constitution must be put in place at the earliest. The objective of this work is to unravel the reasons by which he played our Tamaulipas legislative body in the wrong way to article 115, section II, subsection a) of the political Constitution of the Mexican United States, published in the Official Journal of the Federation on date on December 23, 1999, which prevented the establishment of municipal administrative disputes courts, and as a result of this, the development and growth of public entities referred to as municipalities. As conclusion can be the firm conviction that once the reform under the proposed terms, would only by establishing the municipal administrative disputes courts in the State of Tamaulipas, and achieve this true strengthening of the municipalities of Mexico, particularly those of our State, to be consistent with the intention of the federal legislature, in its reform constitutional article 115 of December 23, 1999.

**KEY WORDS**: Municipality, administrative courts, Tamaulipas, federal Constitution.

### INTRODUCCIÓN

El presente ensayo trata de aclarar el verdadero significado y alcance que debe darse al término procedimiento administrativo establecido en el inciso a) de la fracción II del artículo 115 de la Constitución Política de los Estados Unidos Mexicanos, ya que dicha voz ha provocado dos corrientes antagónicas, consistentes, la primera, en que dicho vocablo exclusivamente se refiere a los recursos administrativos; y la segunda, incluye tanto los recursos administrativos, como la justicia contenciosa municipal, con lo cual permite el establecimiento de los tribunales de lo contencioso administrativo municipales. Por lo anterior, la monografía que ahora se presenta trata de probar que la correcta interpretación que se debe dar, es la relativa a la segunda corriente antes apuntada por los motivos y las razones que se exponen a lo largo del presente trabajo.

Es por ello que a través de este estudio se presentan, las razones por las cuales se considera equivocada la forma en que interpretó nuestro órgano legislativo estatal la reforma al artículo 115, fracción II, inciso a) de la Constitución Política de los Estados Unidos Mexicanos, publicada en el *Diario Oficial de la Federación* en fecha 23 de diciembre de 1999, lo que impidió la instauración de los tribunales contenciosos administrativos municipales, y como consecuencia de ello, el desarrollo y crecimiento de los entes públicos denominados municipios. No obstante, para lograr los objetivos trazados, es necesario realizar una reseña histórico-jurídica de lo que ha sido el establecimiento y desarrollo del Tribunal Fiscal del Estado, para estar en aptitud de abordar el tema de la presente monografía, y terminaremos como es preceptivo en todo trabajo, y de forma sintética las principales propuestas sobre la manera adecuada de lograr la debida interpretación del término *procedimiento administrativo* establecido en el inciso a) de la fracción II del artículo 115 de nuestra ley de leyes.

*Antecedentes:* Para tener idea de los motivos que propiciaron la elaboración del presente ensayo, tendré que referirme, aunque someramente, al origen y desarrollo del Tribunal Fiscal del Estado de Tamaulipas, en relación con la reciente reforma al artículo 115 constitucional publicada en el *Diario Oficial de la Federación* el 23 de diciembre de 1999, específicamente al inciso a) de su fracción II, que permite de manera expresa el establecimiento de tribunales de lo contencioso administrativo municipales.

El Estado de Tamaulipas cuenta con el tribunal contencioso administrativo más antiguo del país, fundado en Ciudad Victoria en 1951, en donde tiene su actual residencia (CIDE, 2011). El tribunal Fiscal del Estado de Tamaulipas conforme a los artículos 198 y 199 del es Código Fiscal para el Estado de Tamaulipas (CFET) es un órgano autónomo, unitario que conoce en una sola instancia las materias fiscal y administrativa. El marco normativo de este órgano de justicia administrativa, se encuentra integrado por los siguientes ordenamientos: Constitución política del Estado de Tamaulipas. (CPET), Ley Orgánica de la Administración Pública del Estado de Tamaulipas. (LOAPET), Código Fiscal para el Estado de Tamaulipas.

De Acuerdo al artículo 198 del CFET, El Tribunal Fiscal del Estado de Tamaulipas conocerá del juicio de nulidad, dictará sus fallos en representación del Ejecutivo del Estado o de los Ayuntamientos, pero será independiente de cualquier otra autoridad administrativa. En otras palabras el Código Fiscal del Estado, regula la organización y funcionamiento del Juzgado Fiscal del Estado que era un tribunal administrativo con facultades para tramitar los juicios que se presenten en contra de las resoluciones que pronuncien las autoridades fiscales estatales y municipales en donde se consideraba al juez de lo fiscal como autónomo dentro de la esfera del Ejecutivo estatal con facultades anulatorias. (Ruiz, 1991)

No obstante, en el Código Fiscal para el Estado de Tamaulipas, se observan una serie de problemas que genera la aplicación del artículo 198 de la citado ordenamiento; del análisis minucioso del artículo mencionado, se advierte que los dispositivos legales que aquí se comentan, transgreden la carta fundamental de nuestro país, específicamente la actual fracción V del artículo 116 constitucional al dotar de competencia al Tribunal Fiscal del estado para conocer y resolver controversias y conflictos entre la administración pública municipal y los particulares.

*Planteamiento del problema de estudio:* La aplicación del artículo 198 del Código Fiscal del Estado de Tamaulipas trasgrede la carta fundamental de nuestro país, al instituir el Tribunal de Fiscal del Estado con competencia para conocer y resolver controversias y conflictos entre la administración pública municipal y los particulares, aún y cuando con la última reforma realizada por el Poder Legislativo Federal al artículo 115 de la Constitución Política de los Estados Unidos Mexicanos, se otorgó expresamente a los ayuntamientos la facultad jurisdiccional con el fin de que éstos instaurasen tribunales de lo contencioso administrativo municipales; sin embargo, el artículo 58, fracción LVI de la Constitución Política del Estado para conocer y resolver controversias y conflictos que se susciten entre la administración pública municipal y los particulares.

*Objetivo del problema de estudio:* El objetivo de este trabajo es encontrar el verdadero significado y la debida explicación de las razones por las cuales interpretó el Congreso del Estado de Tamaulipas equivocadamente las reformas al artículo 115, fracción II, inciso a) de la Constitución Política de los Estados Unidos Mexicanos, del 23 de diciembre de 1999, impidiendo la instauración de los tribunales contenciosos administrativos municipales en Tamaulipas.

*Justificación del problema:* Considerando al artículo 58, fracción LVI, de la Constitución Política del Estado de Tamaulipas, tiene su razón de ser a nuestro juicio en una indebida interpretación realizada por la legislación local tamaulipeca al artículo 115, fracción II, inciso a) de la Constitución Política de los Estados Unidos Mexicanos, publicada en el *Diario Oficial de la Federación* en fecha 23 de diciembre de 1999, lo que impidió la instauración de los tribunales contenciosos administrativos municipales, y como consecuencia de ello, el desarrollo y crecimiento de los entes públicos denominados municipios.

*Delimitaciones:* El presente documento se delimitará a estudiar el fenómeno de estudio sobre la facultad jurisdiccional de los municipios en el estado de Tamaulipas.

*Limitaciones:* La presente indagatoria se limitará a estudiar el fenómeno de estudio sobre la facultad jurisdiccional contenciosa administrativa de los municipios en el Estado de Tamaulipas.

### **REVISIÓN LITERARIA**

### Análisis Sobre La Facultad Jurisdiccional De Los Municipios Del Estado De Tamaulipas:

Antes de iniciar el análisis de los objetivos trazados para este ensayo, es necesario determinar si el término *procedimiento administrativo* establecido en el multicitado artículo constitucional, incluye también la justicia contenciosa administrativa, administrada a través de tribunales especializados, con competencia exclusivamente municipal, o bien solamente se refiere al recurso administrativo, entendido como aquel que se interpone ante la misma autoridad que emite el acto, es por ello que resulta necesario mencionar el concepto de "procedimiento administrativo", el cual es el conjunto de formas y actos que preceden y preparan un acto administrativo (Fraga, 2009) Nuestra postura inicial respecto del concepto "procedimiento administrativo" nos permite coincidir con el pensamiento del maestro Eduardo García de Enterría cuando manifiesta que: " la actividad de la administración tiene que canalizarse obligadamente a través de unos cauces determinados como requisito mínimo para que pueda ser calificada de

legítima"(García et al, 2011). Así las cosas, dicho vocablo tiene dos acepciones válidas, la primera, que se trata de las decisiones unilaterales que realiza el estado a través de la administración pública — ya sea federal, estatal o municipal—, mismas que se ejecutan aún en contra de la voluntad del obligado; y la segunda, que el procedimiento administrativo constituye la primera de las garantías jurídicas del gobernado frente a la administración pública activa (Nava, 1959). El sistema de recursos contra los actos y disposiciones emanados de la administración constituye, en principio, un segundo círculo de garantías, puesto que permite a los administrados reaccionar frente a los actos y disposiciones lesivos a sus intereses, y obtener eventualmente su anulación, modificación o reforma.

En último término, corresponde a los jueces y tribunales pronunciarse definitivamente sobre la legalidad de la actuación administrativa, bien revisando a dicha actuación y anulando en su caso aquellos actos administrativos que sean disconformes con la norma jurídica, a través de los correspondientes juicios de nulidad o juicios contenciosos administrativos a aquellas actuaciones de la administración que constituyan una alteración al orden jurídico establecido (Nava, 1991). En consecuencia, se puede decir que se engloban, dentro de la acepción en estudio, tanto el recurso administrativo como la actividad jurisdiccional en los tres niveles de gobierno. Luego entonces, debe existir un procedimiento administrativo jurisdiccional — o mejor dicho proceso administrativo— que permita constreñir los actos de la administración pública al principio de legalidad, es decir, que permita deducir las pretensiones fundadas en el derecho administrativo ante un órgano jurisdiccional, que aunque forme parte de la estructura del estado, sea independiente en sus decisiones (Yanome, 2002).En este último sentido, entendido el término "procedimiento administrativo" en relación con el decreto de reforma a la fracción LVI del artículo 58 de la Constitución local, denota la intención del Poder Legislativo Estatal impedir el establecimiento de tribunales de lo contencioso administrativo municipales en el Estado de Tamaulipas, a pesar de que la Constitución general de la república ya permite expresamente su creación, razón por la cual se considera que la Constitución Local del Estado de Tamaulipas transgrede flagrantemente la ley de leyes al no permitir su instauración.

De la lectura que se realizó de dicho decreto, se puede llegar a concluir que dicho vocablo fue interpretado de manera estricta por parte de la citada legislatura estatal, lo que trae como consecuencia que la reforma fuera limitativa, con lo cual se impidió el desarrollo de la justicia administrativa en los municipios del estado al no permitir la creación y establecimiento de los tribunales contenciosos administrativos municipales. Por otra parte, no hay que olvidar que también el inciso a) de la fracción II del artículo 115 constitucional, así como el similar 131 fracción I de la Constitución local, señalan *ad literam*: " incluyendo los medios de impugnación y los órganos para dirimir las controversias entre dicha administración y los particulares", lo que trae consigo de la interpretación literal que se realice a esta parte de las disposiciones que se comentan, que se otorga de manera expresa la facultad para instituir tribunales de lo contencioso administrativo municipales, por lo que se desconoce la razón lógico jurídica por la cual la legislatura estatal sostiene el criterio del contenido del artículo 58, fracción LVI, de la Constitución Política para el Estado Libre y Soberano del Estado de Tamaulipas, y no así el dispositivo en estudio con el fin de dar congruencia, aunque equivocadamente, al ordenamiento supremo del Estado.

Lo anterior trae consigo múltiples problemas en el momento de interpretar armónicamente las diversas disposiciones de la Constitución local, pues, por una parte, aparentemente se prohíbe el establecimiento de tribunales contenciosos administrativos municipales, y por la otra, se otorga la facultad para su instauración, es decir, conforme al contenido de la fracción LVI del artículo 58 del citado ordenamiento, la competencia del Tribunal Fiscal del Estado de Tamaulipas es para conocer controversias de índole estatal y municipal, pero a la vez, atentos a lo dispuesto por la fracción I del artículo 131 del referido cuerpo de leyes, se otorga la facultad de establecer tribunales de lo contencioso administrativo municipales, lo que generaría en el supuesto de su establecimiento una concurrencia de competencias entre el órgano jurisdiccional administrativo estatal y el que se llegue a instaurar con fundamento en este último dispositivo. En consecuencia, si bien es cierto que no existiría un estado de indefensión al

particular, al existir dos órganos jurisdiccionales con competencia para conocer las controversias municipales, sí generaría un estado de incertidumbre para el gobernado pues no sabría a ciencia cierta si sería necesario acudir a las dos instancias o, si acude a cualquiera de ellas, la sentencia que se dicte qué efectos tendría, es decir, ¿cuál de ellas tendría fuerza vinculativa para hacer exigible a la administración municipal el cumplimiento de su contenido? La respuesta, jurídicamente, debe ser ambas, sin embargo, aquí cabría un supuesto práctico, ¿podrá el municipio hacer caso omiso a una sentencia dictada por el órgano jurisdiccional administrativo estatal, al tener el primero un órgano jurisdiccional propio de la misma naturaleza? La respuesta la dará el tiempo.

*Propuesta de Solución a la Problemática en estudio:* Tomando en cuenta que la fracción II del inciso a) del artículo 115 constitucional hace referencia a los medios de impugnación y los órganos para dirimir las controversias entre dicha administración y los particulares, queda entonces por resolver qué debemos entender por el vocablo *procedimiento administrativo*, por lo que éste debe de entenderse con amplitud y abarcar a cualquier medio de protección de los derechos de los particulares, es decir, mediante el recurso administrativo o bien mediante un juicio llevado a través de los tribunales de lo contencioso administrativo municipales (Pérez, 1995).

Cabe recordar y añadir que la fracción V del artículo 116 constitucional otorga la facultad constitucional de establecer tribunales de lo contencioso administrativo estatales con competencia exclusiva estatal, que si bien es cierto, antes de la reforma del 23 de diciembre de 1999, se hacía extensiva a los municipios al no existir otra disposición de orden constitucional federal que permitiera el conocimiento de las cuestiones municipales, y con el fin de no dejar en estado de indefensión al particular de los actos municipales, se le concedió competencia municipal al Tribunal Fiscal del Estado de Tamaulipas.

Sin embargo, con la reforma al artículo 115 constitucional, publicada en el Diario Oficial de la Federación el día 23 de diciembre de 1999, específicamente la fracción II, inciso a), vino a integrar, complementar y dilucidar de manera expresa el contenido y alcance de la fracción V del artículo 116 constitucional, al instaurar en el primer dispositivo que se comenta, la facultad jurisdiccional municipal, es decir, la potestad constitucional de instaurar tribunales de lo contencioso administrativo municipales, lo que impide ya en estos momentos de nuestra historia constitucional el tener como válida la fórmula de la competencia estatal y municipal de los órganos jurisdiccionales administrativos estatales, con base en la fracción V del artículo 116 constitucional, pues al seguir con esa idea se transgrede el orden jurídico constitucional; dicho en otras palabras, se atenta contra la autonomía municipal concedida mediante dicha Si tomamos en consideración que el dispositivo en análisis otorga la facultad a los reforma. ayuntamientos de crear, por un lado, los medios de defensa que los gobernados deberán de tener frente a los actos de la administración pública municipal que puedan generar controversias y conflictos de intereses entre los primeros y los segundos, y por otro, la creación de órganos jurisdiccionales con competencia para conocer y resolver dichas controversias y conflictos entre ellos, que en el caso particular resultan ser las controversias de índole administrativa y fiscal; entonces, igualmente debe ser un tribunal de lo contencioso administrativo municipal el encargado de conocer y resolver los mismos.

Por lo tanto, si la legislatura local de algún Estado, a través de su facultad de iniciar leyes y aprobarlas, no respetara el nuevo contenido del artículo 115 constitucional, estaría contrariando el espíritu de nuestra carta magna, y por consecuencia, de conformidad con el principio de supremacía constitucional, dicha ley o cualquier precepto u ordenamiento alguno, según la denominación dada en su momento, resultaría inconstitucional, puesto que con ello se atentaría a lo dispuesto por el citado numeral, y como consecuencia, al pacto federal (Yanome, 2002). Razón por la cual se propone como solución, con el fin de salvaguardar la supremacía de nuestra Constitución general de la república, respecto de la similar local del Estado, esclarecer la intención del legislador en este ensayo, y así evitar confusiones futuras respecto de lo que debemos entender por *procedimiento administrativo* contenido en el inciso a) de la fracción II del artículo 115 constitucional. En este orden de ideas, dicho término debe ser entendido conforme a

Andrés Serra (1992) como aquella que contiene tanto el sistema de recursos administrativos como los juicios contenciosos administrativos, con el fin de estar acorde con el sistema de garantías de los gobernados por lo que se propone, con el fin de evitar confusiones doctrinarias, así como cumplir con uno de los objetivos trazados en este trabajo, que se suprima del inciso a) de la fracción II del artículo 115 constitucional, el vocablo "procedimiento administrativo", y en su lugar se establezca la voz "órganos jurisdiccionales".

*Consecuencias de la propuesta de solución al problema en estudio:* Es importante no quedarnos en el plano enunciativo del problema y su solución, por lo que la materialización de la propuesta expuesta en el apartado que antecede, sólo se cristalizaría mediante dos supuestos: el primero, que los Estados respeten los derechos y prerrogativas concedidas a los municipios mediante la reforma al artículo 115 constitucional, publicada en el *Diario Oficial de la Federación* el 23 de diciembre de 1999, y segundo, independientemente de que se reforme el contenido del inciso a) de la fracción II del artículo 115 constitucional en los términos que se proponen en este escrito del apartado anterior, las legislaturas estatales comprendan el término "procedimiento administrativo", con el fin de que adecuen su Constitución local para permitir la instauración de los tribunales contenciosos administrativos en los términos que a continuación se exponen.

### 1. Por cuanto hace a su creación

De acuerdo a Yanome (2002), el fundamento constitucional para la instauración y creación de tribunales de lo contencioso administrativo municipales lo encontramos en la última reforma realizada por el Poder Legislativo federal al artículo 115 de la Constitución Política de los Estados Unidos Mexicanos, publicada en el *Diario Oficial de la Federación* el 23 de diciembre de 1999, la cual otorga la facultad para que los ayuntamientos de todo México instauren tribunales de lo contencioso administrativo municipales, atentos a lo dispuesto por la fracción II, inciso a) del artículo y ordenamiento que se comentan. Siendo necesario instituirlo, no por cada municipio, aún y cuando así lo determina la Constitución general, no obstante, se señalan a continuación sus ventajas:

- a. Obtendrían los municipios del Estado autonomía plena en materia jurisdiccional y se desincorporarían en esta función por completo.
- b. Se liberaría de una gran carga de trabajo a los tribunales federales, pues no existirían controversias constitucionales por invasión de esferas competenciales en este rubro.
- c. Se permitiría crecer a los Ayuntamientos del Estado, al poder ellos mismos dirimir su controversias y conflictos con sus gobernados, asimismo, se agilizaría el funcionamiento del Tribunal Fiscal del Estado al conocer éste solamente de controversias y conflictos de índole estatal.
- d. Se dotaría de un procedimiento confiable, claro y preciso en cuanto hace a la impartición de justicia administrativa municipal.
- e. La desventaja que hasta la fecha se ha encontrado para su establecimiento es la siguiente: debido a la precaria situación económica que tienen algunos municipios del Estado de Tamaulipas, y como todos ellos se rigen por un presupuesto de egresos, será necesario destinar una partida para su instauración en los municipios, razón por la que la propuesta elegida dependerá de ello.

### 2. Respecto a su funcionamiento

Se considera necesario que el Tribunal de lo Contencioso Administrativo Municipal cuente con al menos una Sala Superior y tres salas regionales, y para tal fin será indispensable dividir al Estado en tres regiones: la del Centro, la del Sur y la del Norte. En la primera se establecería la Sala Superior y una regional, y se erigiría en el Municipio de Ciudad Victoria; además, por territorio, tendría competencia en los siguientes municipios: Abasolo, Bustamante, Casas, Güemez, Hidalgo, Jaumave, Jiménez, Llera, Mainero, Miquihuana, Padilla, Palmillas, San Carlos, San Nicolás, Soto la Marina y Villagrán.

En la del Sur se establecería una Sala Regional, y se erigiría en Tampico; también, por territorio, tendría competencia en Aldama, Altamira, Antiguo Morelos, Ciudad Madero, Gómez Farías, González, El Mante, Nuevo Morelos, Ocampo, Tula y Xicoténcatl.

En la del Norte se establecería una Sala Regional, y se erigiría en Reynosa; por territorio, tendría competencia en Burgos, Camargo, Cruillas, Guerrero, Gustavo Díaz Ordaz, Matamoros, Méndez, Mier, Miguel Alemán, Nuevo Laredo, Río Bravo, San Fernando y Valle Hermoso. Una vez dividido el Estado en regiones, será necesario determinar la competencia de la Sala Superior y la de las salas regionales de los tribunales de lo contencioso administrativo municipales, mismas que se delimitaría en una iniciativa de ley que se denominaría: Ley de Justicia Contencioso Administrativa para los Municipios del Estado de Tamaulipas, y que para fines de una mejor comprensión del tema se transcribe lo siguiente: Por una parte, se encuentra la Sala Superior que tendría las siguientes atribuciones:

I. Resolver los recursos de revisión que se interpongan en contra de las resoluciones de las Salas Regionales; II. Establecer los criterios de interpretación de las disposiciones legales; III. Conocer las excitativas que para la impartición de justicia promuevan las partes, cuando los Magistrados de las Salas Regionales no dicten la resolución que corresponda dentro de los plazos señalados por esta ley; IV. Calificar las excusas o impedimentos de los Magistrados del Tribunal y en su caso, designar a quienes deban substituirlos; V. Resolver los conflictos de competencia que se susciten entre las salas regionales; VI. Establecer las reglas para la distribución de los asuntos entre las Salas Regionales y entre los Magistrados de la propia Sala; VII. Conocer del cumplimiento de las sentencias del Tribunal y en su caso ejecutarlas; VIII. Designar de entre sus miembros al Presidente del Tribunal; IX. Fijar y cambiar la adscripción de los Magistrados de las Salas Regionales; X. Designar a quienes suplan las ausencias temporales de los Magistrados de las Salas Regionales;

XI. Nombrar al Secretario de Acuerdos, a los Secretarios, a los Actuarios, Jefe de la unidad de apoyo administrativo, de documentación y difusión y defensores de oficio; así como concederles licencias y acordar lo que proceda con respecto a su remoción; XII. Dictar las medidas necesarias para el despacho pronto y expedito de los asuntos de la competencia del Tribunal; XIII. Designar las Comisiones de Magistrados que sean necesarias para la administración interna y representación del Tribunal; XIV. Formular anualmente el proyecto de presupuesto de egresos del Tribunal; XV. Expedir o modificar el reglamento interior del Tribunal, así como las demás disposiciones necesarias para su buen funcionamiento; XVI. Designar entre sus miembros a los Magistrados visitadores de las Salas Regionales, los que darán cuenta del funcionamiento y disciplina de las Salas y aplicarlas a los secretarios, actuarios y demás empleados, incluso los defensores, en los casos procedentes; XVIII. Publicar las sentencias del Tribunal que considere deban darse a conocer por ser de interés general; XIX. Aplicar los medios de apremio para hacer cumplir las resoluciones del Tribunal; y XX. Las demás que señala esta ley. Por la otra se encuentran las salas regionales; la cuales tendrían las siguientes atribuciones:

I. Son competentes para conocer de los juicios que se inicien en contra de los actos o resoluciones dictados, ordenados, ejecutados o tratados de ejecutar, por autoridades administrativas, fiscales u organismos descentralizados de la Administración Pública Municipal, o de participación Municipal, que a continuación se indican: a) Que determinen la existencia de una obligación fiscal, la fijen en cantidad líquida o den las bases para su liquidación; b) Que nieguen la devolución de un ingreso de los regulados por las leyes de hacienda de los municipios, indebidamente percibido; c) Los dictados en el procedimiento administrativo de ejecución fiscal, siempre y cuando se afirme:1. Que el crédito fiscal que se exige se ha extinguido legalmente; 2. Que se es poseedor, a título de propietario, de los bienes embargados en el

procedimiento administrativo de ejecución seguido contra otras personas; o que se es acreedor preferente al fisco, para ser pagado con el producto de los mismos; y 3. Que el procedimiento fiscal de ejecución no se encuentra ajustado a la ley. En este caso no podrá hacerse valer el juicio de nulidad sino contra la resolución definitiva en la que se apruebe o desapruebe el remate, excepción hecha de las resoluciones cuya ejecución material sea de imposible reparación. En los juicios que se promuevan por alguna de las causas a que se refieren los dos últimos números de este inciso, no podrá discutirse la existencia del crédito fiscal. d) Que causen un agravio en materia fiscal, distinto a los precisados en los números anteriores, así como todos aquellos actos realizados por cualquier autoridad administrativa, municipal, fuera del procedimiento de ejecución fiscal; e) Que impongan sanciones no corporales por infracción a las leyes y reglamentos municipales; f) Que constituyan responsabilidad administrativa en contra de los funcionarios, empleados o trabajadores al servicio de los municipios del Estado; g) Los dictados en materia de pensiones con cargo al erario municipal de cualquiera de los municipios de la entidad, o de las instituciones municipales de seguridad social; h) Que se refieran a la interpretación, cumplimiento o incumplimiento de contratos administrativos, en los que sea parte los municipios de la entidad, los organismos descentralizados o las empresas de participación municipal; i)

Los relativos a la responsabilidad reclamada a los municipios del Estado, a los organismos descentralizados o empresas de participación municipal. Estos organismos podrán repetir de los funcionarios o empleados responsables administrativamente del hecho o acto que originó el daño; j) Los relativos a las indemnizaciones que deban cubrirse a particulares, motivadas por la expropiación de bienes por causa de utilidad pública y que den motivo a controversia; k) Los relativos a la responsabilidad de los funcionarios o empleados de los municipios del Estado, de los organismos descentralizados o empresas de participación municipal mayoritaria de quienes provenga el acto administrativo, en los términos de la Ley de Responsabilidades de los Servidores Públicos del Estado de Tamaulipas: 1) Los que se promuevan contra cualquier acto u omisión de las autoridades administrativas de los Municipios pertenecientes al Estado, o de los organismos descentralizados o empresas de participación municipal, que afecten los intereses jurídicos de los particulares; m) Los que se promuevan en contra de las resoluciones dictadas por autoridades administrativas o fiscales municipales, al resolver los recursos establecidos por las leyes y reglamentos respectivos; n) Los que promuevan las autoridades municipales o los titulares de los organismos descentralizados o las empresas de participación municipal para que sean nulificadas las resoluciones administrativas o fiscales dictadas por ellas mismas, favorables al particular; o) Los que se promuevan en contra de las resoluciones negativas fictas, configuradas por el silencio de la autoridad para dar respuesta a la instancia de un particular en el plazo que la ley fije o a falta de término en treinta días hábiles; p) Los demás juicios que se promuevan en contra de los actos o resoluciones que las leves consideren como competencia de este Tribunal; q) De los recursos de reclamación que se interpongan en contra de los autos de desechamiento de la demanda o contestación; el que niegue la intervención del tercero perjudicado; y el que deseche las pruebas ofrecidas antes de la celebración de la audiencia del juicio; r) De reclamaciones por el incumplimiento de las sentencias de la propia Sala Regional; y s) De los recursos de queja.

II. Las atribuciones administrativas de la Sala Regional serán:

a) Despachar la correspondencia de la Sala; b) Rendir oportunamente al Presidente del Tribunal un informe bimestral de las labores de la Sala y de las principales resoluciones dictadas; c) Imponer las correcciones disciplinarias que procedan; d) Proponer a la Sala Superior los nombramientos de Secretarios, Actuarios, Defensores de Justicia Administrativa y al Presidente del Tribunal; el personal administrativo de la Sala; y e) Las demás que señalen las disposiciones aplicables.

III. Las Salas Regionales conocerán, por razón del territorio, de los actos o resoluciones que dicten u ordenen las autoridades administrativas con sede en su jurisdicción; pero si la resolución es susceptible de

ejecución, será competente la Sala Regional en cuya jurisdicción se ejecute, se haya ejecutado, trate de ejecutarse o deba tener ejecución.

### CONCLUSIONES

De todo lo antes expuesto, podemos llegar a la firme convicción de que una vez realizada la reforma en los términos propuestos, sólo quedaría por instaurar los Tribunales Contenciosos Administrativos Municipales en el Estado de Tamaulipas, y lograr con esto el verdadero fortalecimiento de los municipios de México, particularmente los de nuestro Estado, para ser coherentes con la intención del legislador federal, en su reforma al artículo 115 constitucional de 23 de diciembre de 1999.

2. Finalmente, el último de los objetivos de este opúsculo es dejar con inquietud a los lectores, así como despertar el interés por el análisis de este tema en algunos de los servidores públicos encargados de la reformas a las leyes tanto federales como estatales.

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# REFORMA LABORAL: TENDENCIA DE LA PREVISIÓN SOCIAL PARA LAS NUEVAS GENERACIONES

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### RESUMEN

El objetivo de este trabajo es estudiar la relevancia y tendencias de las "prestaciones de previsión social" con la nueva reforma laboral que actualmente se vive en México, así como la pertinencia del impacto en el trabajador y el empleador. La Ley Federal del Trabajo no señala alguna definición de Previsión Social, aun cuando se trata de un término laboral (con implicaciones fiscales); sin embargo, este tipo de prestaciones son otorgadas a los trabajadores por el simple hecho de serlo, es decir, no están condicionadas a la calidad o productividad en la prestación del servicio y normalmente se incluyen en un plan de previsión social al interior de las empresas. La reforma laboral va orientada a impulsar la productividad, flexibilización en las contrataciones y empleabilidad, entre otras reformas propuestas; las cuales, de no articularse con otro tipo de modificaciones en al ámbito tributario, legal y penal, impactan en la disminución de las prestaciones de previsión social para las generaciones futuras.

PALABRAS CLAVE: Previsión Social, Prestaciones, Salarios, Trabajador.

# LABOR REFORM: TREND OF THE FORECAST FOR THE NEW SOCIAL GENERATIONS

### ABSTRACT

The objective of this article is to study the relevance and trends of the "benefits of social insurance" with the actual new reform in Mexico, just as the relevance of the impact on the worker and employer. The Federal Labor Law does not show any definition of Social Insurance, even when it is a technical term (with tax implications; however this type of benefits are granted to workers by the simple fact of being what it is, they are not subject to the quality of or productivity in the provision of the service and are normally included in a plan of social welfare within the companies. The labor reform is oriented to encourage productivity, flexibility in hiring, and employability, among other proposed reforms; which if not be articulated with other type of modifications in the area of taxation, and criminal law, impact in the decrease of benefits for future generations.

**JEL:** H550, J320, E240, J830

KEYWORDS: Social welfare, benefits, salary, worker

### INTRODUCCION

Las condiciones de México han cambiado mucho desde que entro en vigor la Ley Federal del Trabajo (1970), tanto en el aspecto social, económico, político, demográfico, aunado al impacto del entorno mundial y la globalización. Esta situación hace necesaria una reforma estructural, que contemple y propicie condiciones favorables para generar empleo y promueva la competitividad sin agravio de las condiciones de bienestar social del trabajador. Si bien es cierto que los mercados laborales actuales hacen

necesaria una reforma laboral integral, las modificaciones propuestas en la actual reforma laboral no están articuladas con otro tipo de acciones que equilibre la protección social y el nuevo entorno. Por otra parte, se resalta que la otorgación de estas prestaciones beneficia a los trabajadores para satisfacer contingencias o necesidades presentes o futuras y su impacto en la superación de la calidad de vida y superación física, económica o cultural no debiera adquirir mayor dominio en las normas fiscales; olvidando el origen de una regulación más profunda como es la laboral.

Es así que las tendencias de la reforma laboral actual abarcan entre otros aspectos no menos importantes, el de favorecer la empleabilidad y productividad de los trabajadores; no obstante, la esencia o relevancia principal de las prestaciones de Previsión Social están pasando a segundo término para las futuras generaciones y las estrategias fiscales utilizando las citadas prestaciones, continúan tomando fuerza en las leyes fiscales para efectos tributarios. Lo antepuesto derivado de que México es un país donde la gran parte de la población económicamente activa percibe salarios con los que apenas se puede subsistir, justificando con esto, las estrategias fiscales para la promoción del otorgamiento de estas prestaciones, principalmente, para disminuir el impuesto sobre la renta y cuotas de seguridad social para el empleador y trabajador respectivamente.

### **REVISION DE LITERATURA**

La Constitución de 1917 introdujo la garantía social del derecho al trabajo, reglamentaria del artículo 123 constitucional, denominada "Ley Reglamentaria del Artículo 123 Constitucional". La Ley Federal del Trabajo de 1970 contiene los principios para dar cumplimiento a los derechos sociales de los trabajadores consagrados en nuestra Carta Magna desde 1917 y las bases que permiten regular la relación de trabajo conforme al principio de dignidad del trabajo y de garantizar los derechos sociales de los trabajadores. Desde sus inicios, ha sido un ordenamiento legal fundamental para el bienestar social, la operación y desarrollo económico nacional y regional del país, aspectos todos esenciales para elevar los niveles de bienestar, el desarrollo humano y económico de México.

### Legalidad Del Salario

Para abordar el tema de Previsión Social señalaremos su relación intrínseca con los salarios, así como con los incentivos y prestaciones. En México, el régimen contributivo es complejo y los salarios son un elemento esencial de las condiciones de trabajo y empleo en las entidades. Al ser éstos un costo para los empleadores y principal fuente de ingresos de los trabajadores, los salarios pueden ser objeto de conflictos y se han convertido en un trascendental tema de las negociaciones colectivas en todo el mundo. Al mismo tiempo, los salarios pueden causar situaciones de discriminación y privación si no se les garantiza a los trabajadores un nivel mínimo que sea digno. Desde el punto de vista de la economía, los salarios son parte importante de los costos laborales y son una variable esencial para la competitividad de las empresas que requiere ser analizada, también en su relación con otros factores como el empleo, la productividad y la inversión. Por estos motivos los Estados, junto con representantes de empleadores y trabajadores, han reconsiderado sus políticas salariales y han realizado importantes reformas o han evaluado nuevas estrategias, para lo cual se ha pedido apoyo a la Organización Internacional del Trabajo (OIT 2012). En el artículo 30. de la Ley Federal del Trabajo se señala que el trabajo es un derecho y deber social, no es artículo de comercio, exige respeto para las libertades y dignidad de quien lo presta y debe efectuarse en condiciones que aseguren la vida, la salud y un nivel económico decoroso para el trabajador y su familia; entendiéndose entonces el salario como un instrumento de justicia social.

### Conceptos Por Pagos De Servicios Subordinados

En el ámbito laboral y de seguridad social prevalece el uso del vocablo "salario"; el artículo 123 apartado "A" de la Constitución, la Ley Federal del Trabajo y la Ley del Infonavit lo emplean Nuestra Ley Federal

del Trabajo, en el artículo 82, define el salario como: "la retribución que debe pagar el patrón al trabajador por su trabajo", a su vez, el artículo 84 señala que el salario se integra con los pagos hechos en efectivo por cuota diaria, gratificaciones, percepciones, habitación, primas, comisiones, prestaciones en especie y cualquiera otra cantidad o prestación que se entregue al trabajador por su trabajo. Diccionario de la Real Academia:

- a) Salario: salario. (Del lat. salarium, de sal, sal).
- 1. m. Paga o remuneración regular.
- 2. m. En especial, cantidad de dinero con que se retribuye a los trabajadores por cuenta ajena.

b) Sueldo: (Del lat. solĭdus).

1. m. Remuneración regular asignada por el desempeño de un cargo o servicio profesional.

2. m. Moneda antigua, de distinto valor según los tiempos y países, igual a la vigésima parte de la libra respectiva. Real Academia Española. Todos los Derechos Reservados La Ley del Impuesto sobre la Renta maneja varios conceptos para referirse a la retribución por la prestación de servicios personales subordinados: salario, sueldo e ingresos asimilados a salarios.

c) *Asimilables a Salarios*: Este concepto aparece en la Ley del Impuesto Sobre la Renta (LISR) para efectos fiscales. En este sentido, el artículo 110 de la LISR plantea ingresos que pueden recibir las personas físicas sin ser salarios. Lo que se asimila es una serie de ingresos a los que esta ley le da un tratamiento análogo al salario, ya que el término asimilable a salario no lo contempla la Ley federal del Trabajo.

*Prestaciones E Incentivos:* Para comprender cabalmente la jerarquía de las prestaciones de previsión social, a continuación se presenta explicación de lo que se considera "incentivos" y "prestaciones"; lo que nos lleva a resumir que las prestaciones de previsión social se otorgan por el simple hecho de serlo, es decir, no están condicionadas a la calidad, cantidad o prestación del servicio o trabajo y normalmente se incluyen en un plan de previsión social al interior de la empresa.

*Incentivos:* El aspecto legal a observar por la empresa al otorgar un incentivo, es que una vez establecido un sistema de esta clase resulta obligatorio, en virtud de que de alguna forma se integra a las condiciones del trabajo convenidas por la compañía, sólo que a diferencia de las prestaciones que guardan el mismo principio, éstos se otorgan únicamente por méritos del trabajador. Ocurre con mucha frecuencia, sobre todo tratándose de incentivos sobre ventas, que las empresas pretendan modificar el incentivo otorgado y los trabajadores se nieguen a aceptar tal modificación. Al respecto se debe señalar que los incentivos podrían ser sustituidos con la anuencia de los trabajadores, pero no eliminados, pues se trataría de una renuncia de derechos, no permitida según lo establecido en el artículo 33 de la Ley Federal del Trabajo (LFT).

*Entre los incentivos se pueden citar:* Gratificaciones extraordinarias; Premios por: asistencia, puntualidad, productividad y compensación por antigüedad Como puede apreciarse en esta última lista, el trabajador se ve obligado a cumplir con determinado requisito para tener derecho a la retribución.

*Prestaciones:* El otorgamiento de estos conceptos tiene como finalidad proporcionar a los trabajadores y a sus familias la satisfacción de sus necesidades esenciales y la posibilidad de superación de su nivel de vida, esto es, las concede el patrón a sus trabajadores por el simple hecho de tener esa calidad, por tanto, no las vincula con la prestación del servicio. Regularmente este tipo de prestaciones se plasman en un plan de previsión social o en las políticas por escrito del otorgamiento de prestaciones, en donde se precisan cuales son estos beneficios y quienes tienen derecho a los mismos, y una vez otorgados ya no se pueden eliminar, salvo que se justifique ante la Junta de Conciliación y Arbitraje la razón por la que se desea hacer y ésta analice y autorice tal modificación en las prestaciones de los trabajadores (artículos 17,

33 y 57 de la LFT). Como puede apreciarse, los incentivos o premios resultan sin duda atractivos para los trabajadores, por lo que las empresas deben constituirlos como un instrumento para el logro de sus objetivos.

*Naturaleza de las prestaciones:* A diferencia de lo que ocurre con los incentivos o premios, las prestaciones aunque no estimulan la productividad, sí generan un sentimiento de lealtad a la compañía.

*Incentivos contra Prestaciones:* Ciertamente los incentivos tienen una naturaleza diferente a la de las prestaciones, pues las últimas forman parte de la estructura salarial otorgada usualmente a todo el personal, en virtud de que son parte de la contratación misma en cuanto al elemento salarial se refiere. Por su parte, los estímulos si bien son ofrecidos a los trabajadores en general, no siempre son otorgados a éstos en su conjunto, ya que su obtención está vinculada al logro de un objetivo determinado por la empresa, en tanto que las prestaciones se otorgan simplemente por ser trabajador de una compañía, por ejemplo: Gastos médicos y/u hospitalarios; Despensas; Ayuda económica por fallecimiento; Subsidio por incapacidad; Ayuda para transporte; Becas educacionales, Guarderías infantiles; Cuotas IMSS pagadas por el patrón entre otras.

Es preciso comentar que algunas de estas prestaciones se otorgan ciertamente sólo a un sector de los trabajadores en el país, pero ello obedece a la naturaleza de la prestación, así como a los razonamientos de orden legal, principalmente en materia de seguridad social y fiscal.

### Legalidad De La Prevision Social

Una vez analizada la naturaleza de los salarios, así como la diferencia entre los incentivos y las prestaciones; nos enfocamos al análisis de las Prestaciones de Previsión Social para analizar la tendencia que van tomando con la propuesta de reforma laboral actual.En su artículo segundo, la Ley Federal del Trabajo 2012, establece que: "Las normas de trabajo tienden a conseguir el equilibrio y la justicia social en las relaciones entre trabajadores y patrones". Las prestaciones de previsión social contempladas en diferentes ordenamientos, desde la Constitución Política hasta las leyes federales, se rigen bajo los principios rectores de justicia social implícitos en los preceptos de referencia y todas ellas tienden a generar condiciones favorables a los trabajadores para el desempeño de sus actividades, no sólo en el aspecto económico, sino también en lo que concierne a su dignidad humana.

Por lo tanto, en el derecho mexicano, la previsión social emanó como un capítulo del derecho laboral y complementario del derecho individual del trabajo como se corrobora en el rubro del artículo 123 constitucional: "Del trabajo y la previsión social". No obstante lo anterior, la Constitución Política Mexicana y Ley Federal del Trabajo no señalan textualmente alguna definición propia de Previsión Social, aun cuando se trata de un término laboral aunque con alcances fiscales.

### Conceptos De Prevision Social

En el Diccionario de la Real Academia Española, 2012, se manifiesta que el término previsión social, puede definirse como la "acción de prever lo conveniente para atender a contingencias o necesidades previsibles, mientras que la palabra social es un adjetivo y significa perteneciente o relativo a la sociedad o a las contiendas entre unas y otras clases". De igual forma el Diccionario Jurídico sobre Seguridad Social, 2012, señala que el concepto previsión social se refiere al "apoyo económico que se otorga a obreros y empleados, así como a sus familiares, en el caso de sobrevenir la falta de medios para subsistir por motivos naturales o involuntarios, derivados de accidentes, enfermedades, paros forzosos, invalidez, ancianidad o fallecimiento". Entre otras definiciones importantes podemos mencionar la siguiente:

Bobadilla, R., 2005, hace referencia a una definición del autor Mario de la Cueva, donde define la previsión social como: Las políticas y las instituciones que se proponen contribuir a la preparación y ocupación del trabajador, para facilitarle una vida cómoda e higiénica y asegurarle contra las

Tesis: 2a. XLV/2010 Semanario Judicial De La Federación Y Su Gaceta Novena Época 164248 8 De 40 SEGUNDA SALA XXXII, Julio De 2010 Pag. 324 Tesis Aislada (Constitucional, Administrativa) [TA]; 9a. Época; 2a. Sala; S.J.F. Y Su Gaceta; XXXII, Julio De 2010; Pág. 324 RENTA. EL ARTÍCULO 80. DE LA LEY DEL IMPUESTO RELATIVO, QUE CONTIENE EL CONCEPTO DE PREVISIÓN SOCIAL DIRIGIDO TAMBIÉN A LAS SOCIEDADES COOPERATIVAS, RESPETA EL PRINCIPIO DE EQUIDAD TRIBUTARIA (LEGISLACIÓN VIGENTE A PARTIR DEL 5 DE JUNIO DE 2009).

El precepto legal citado no considera previsión social a las erogaciones efectuadas a favor de personas que no tengan dicho carácter; sin embargo, esta última precisión sólo se traduce en el reconocimiento del derecho de los socios o miembros de dichas sociedades a gozar del beneficio referido, y no implica que se equiparen las relaciones entre trabajadores y patrones con la existente entre las sociedades cooperativas y sus socios. Ahora bien, en atención a que el objetivo de considerar a las sociedades cooperativas como personas obligadas a otorgar tal beneficio surgió por la necesidad de evitar la erosión de la base del impuesto sobre la renta, ya que fue notorio el incremento de sociedades cooperativas dedicadas a la prestación de servicios profesionales y al suministro de recursos humanos creadas para reducir cargas

fiscales y de seguridad social, provocando la no retención del impuesto de que se trata, resulta indudable que el artículo 80. de la Ley del Impuesto sobre la Renta, vigente a partir del 5 de junio de 2009, respeta el principio de equidad tributaria contenido en el artículo 31, fracción IV, de la Constitución Política de los Estados Unidos Mexicanos, pues da un trato distinto a sujetos diferentes, y además porque sólo destaca lo que debe entenderse por previsión social, entendida como la prestación que debe beneficiar a los trabajadores, socios o sus familiares; luego, cualquier erogación efectuada a favor de persona distinta no puede considerarse como tal, pues no se cumpliría con el objetivo de satisfacer contingencias o necesidades presentes o futuras en beneficio de los trabajadores, socios o miembros de las sociedades, logrando con ello su superación física, económica o cultural, para mejorar su calidad de vida y la de su familia.

SEGUNDA SALAAmparo en revisión 279/2010. Consultoría y Asesoría Metropolitana, Sociedad Cooperativa de Responsabilidad Limitada. 19 de mayo de 2010. Cinco votos. Ponente: Margarita Beatriz Luna Ramos. Secretaria: Claudia Mendoza Polanco. Registro No. 203533 Localización: Novena Época Instancia: Tribunales Colegiados de Circuito Fuente: Semanario Judicial de la Federación y su Gaceta III, Enero de 1996 Página: 203 Tesis: I.3o.A. J/5 Jurisprudencia Materia(s): Administrativa

Renta, Impuesto Sobre La. Gasto De Prevision Social. Concepto. Tomando En cuenta lo dispuesto por los artículos 20, fracción VII, y 26, fracción VII, de la Ley del Impuesto sobre la Renta en vigor para el ejercicio de 1975, en relación con el artículo 50, fracción II, inciso b) del mismo ordenamiento legal, por gasto de previsión social a cargo de una empresa, debe entenderse aquel que se traduce en una prestación en beneficio de los trabajadores, de sus familiares dependientes o beneficiarios, tendientes a su superación física, social, económica, cultural e integral; esto es, toda prestación en beneficio de los trabajadores y de sus familiares o beneficiarios que tengan por objeto elevar su nivel de vida económico, social, cultural e integral.

TERCER TRIBUNAL COLEGIADO EN MATERIA ADMINISTRATIVA DEL PRIMER CIRCUITO. Amparo directo 843/77. Embotelladora de Reynosa, S.A. 29 de noviembre de 1977. Unanimidad de votos. Ponente: Sergio Hugo Chapital Gutiérrez.

Nota: En el Informe de 1978, la tesis aparece bajo el rubro "RENTA, IMPUESTO SOBRE LA. GASTO

DE PREVISION SOCIAL. CONCEPTO.". Genealogía: Informe 1978, Tercera Parte, Tribunales Colegiados de Circuito, tesis 81, página 198.

Por otra parte, continúa vigente la definición de Previsión Social en el artículo 8 penúltimo párrafo de la Lev del Impuesto sobre la Renta 2012, el cual establece: Para los efectos de esta lev, se considera previsión social las erogaciones efectuadas que tengan por objeto satisfacer contingencias o necesidades presentes o futuras, así como el otorgar beneficios a favor de los trabajadores o de los socios o miembros de las sociedades cooperativas, tendientes a su superación física, social, económica o cultural, que les permitan el mejoramiento en su calidad de vida y en la de su familia. En ningún caso se considerará previsión social a las erogaciones efectuadas a favor de personas que no tengan el carácter de trabajadores o de socios o miembros de sociedades cooperativas.

### Consideraciones Estipuladas En La Ley Del Seguro Social

Al estar hablando de salarios prestaciones, incentivos y otros conceptos análogos es importante remitirnos como complemento a la Ley del Seguro Social en su artículo 27, el cual señala lo siguiente: El salario base de cotización se integra con los pagos hechos en efectivo por cuota diaria, gratificaciones, percepciones, alimentación, habitación, primas, comisiones, prestaciones en especie y cualquiera otra cantidad o prestación que se entregue al trabajador por su trabajo. Se excluyen como integrantes del salario base de cotización, dada su naturaleza, los siguientes conceptos:

I. Los instrumentos de trabajo tales como herramientas, ropa y otros similares;

II. El ahorro, cuando se integre por un depósito de cantidad semanaria, quincenal o mensual igual del trabajador y de la empresa; si se constituye en forma diversa o puede el trabajador retirarlo más de dos veces al año, integrará salario; tampoco se tomarán en cuenta las cantidades otorgadas por el patrón para fines sociales de carácter sindical;

**III.** Las aportaciones adicionales que el patrón convenga otorgar a favor de sus trabajadores por concepto de cuotas del seguro de retiro, cesantía en edad avanzada y vejez;

IV. Las cuotas que en términos de esta Ley le corresponde cubrir al patrón, las aportaciones al Instituto del Fondo Nacional de la Vivienda para los Trabajadores, y las participaciones en las utilidades de la empresa;

V. La alimentación y la habitación cuando se entreguen en forma onerosa a los trabajadores; se entiende que son onerosas estas prestaciones cuando el trabajador pague por cada una de ellas, como mínimo, el veinte por ciento del salario mínimo general diario que rija en el Distrito Federal;

VI. Las despensas en especie o en dinero, siempre y cuando su importe no rebase el cuarenta por ciento del salario mínimo general diario vigente en el Distrito Federal

VII. Los premios por asistencia y puntualidad, siempre que el importe de cada uno de estos conceptos no rebase el diez por ciento del salario base de cotización;

VIII. Las cantidades aportadas para fines sociales, considerándose como tales las entregadas para

constituir fondos de algún plan de pensiones establecido por el patrón o derivado de contratación colectiva. Los planes de pensiones serán sólo los que reúnan los requisitos que establezca la Comisión Nacional del Sistema de Ahorro para el Retiro, y

**IX.** El tiempo extraordinario dentro de los márgenes señalados en la Ley Federal del Trabajo. Para que los conceptos mencionados en este precepto se excluyan como integrantes del salario base de cotización, deberán estar debidamente registrados en la contabilidad del patrón. En los conceptos previstos en las fracciones VI, VII y IX cuando el importe de estas prestaciones rebase el porcentaje establecido, solamente se integrarán los excedentes al salario base de cotización. *Última Reforma DOF 28-05-2012*.

### Consideraciones De La Propuesta De Reforma Laboral En Mexico

Algunas de las relevancias de la reforma laboral que contiene la iniciativa son: Trabajar y contratar gente por hora, medio tiempo, días de la semana, o meses del año; Empleo a prueba y contar con sueldo, prestaciones proporcionales y seguridad social para los jóvenes; Tipifica como delito la contratación de menores de 14 años fuera del círculo familiar; Modalidad de contratos con capacitación inicial obligatoria; Protege derechos de mujeres, menores de edad, discapacitados, jornaleros agrícolas y trabajadores domésticos; Licencia de paternidad, limita a un año los juicios individuales de salarios vencidos; Patrones con más de 50 empleados deben adecuar sus instalaciones para personas con discapacidad; Prohíbe exigir a las mujeres certificados de no embarazo para entrar a laborar, permanecer o ascender en el mismo; La mujer escogería como repartir las semanas de descanso antes y posterior al parto: Arbitraje para acabar con huelgas eternas en empresas de servicios públicos; Regula la subcontratación (outsorcing) mediante contratos por escrito y con responsabilidad solidaria entre empleadores; Define y castiga la subcontratación dolosa para evadir responsabilidades laborales o fiscales; Hace obligatorio el voto libre o directo y secreto para elegir a los líderes sindicales para no eternizar en sus puestos a dirigentes sindicales; Disponibilidad de información pública por internet de registros de sindicatos para transparencia de recursos.

Por otra parte, la Ley Federal del trabajo en su artículo 523, señala que la aplicación de las normas de trabajo compete, en sus respectivas jurisdicciones: I. A la Secretaría del Trabajo y Previsión Social;La Secretaría del Trabajo y Previsión Social se encarga de vigilar la observancia y aplicación de las disposiciones contenidas en el artículo 123 de la Constitución Política y de la Ley Federal del Trabajo y sus reglamentos. Entre sus ejes rectores de acción destacan: el fomento a la productividad del trabajo, la proyección de planes para impulsar la ocupación en el país, la promoción de medidas para la protección de los trabajadores, y la procuración del equilibrio entre los factores de la producción.

Los organismos que la integran son: Comisión Nacional de los Salarios Mínimos, Instituto del Fondo Nacional para el Consumo de los Trabajadores, Junta Federal de Conciliación y Arbitraje y Procuraduría de la Defensa del Trabajo. A continuación se presenta la tabla donde se contemplan los artículos 2, 5, 35, 39, 83 de la Ley Federal del Trabajo y artículo 123 de la Constitución Política de los Estados Unidos Mexicanos contra las modificaciones propuestas en la reforma laboral.

Articulo	Actual	Propuesta de Modificación
	<ul> <li>Toda persona tiene derecho al trabajo digno y socialmente útil; al efecto, se promoverán la creación de empleos y la organización social para el trabajo, conforme a la ley.</li> <li>El Congreso de la Unión, sin contravenir a las bases siguientes deberá expedir leyes sobre el trabajo, las cuales regirán:</li> <li>A. Entre los obreros, jornaleros, empleados domésticos, artesanos y de una manera general, todo contrato de trabajo:</li> <li>I. La duración de la jornada máxima será de ocho horas;</li> <li>II. La jornada máxima de trabajo nocturno será de 7 horas.</li> <li>Quedan prohibidas: las labores insalubres o peligrosas, el trabajo nocturno industrial y todo otro trabajo después de</li> </ul>	
	las diez de la noche de los menores de dieciséis años;	

Articulo	Actual	Propuesta de Modificación	
	III. Queda prohibida la utilización del trabajo de los		
	menores de catorce años. Los mayores de esta edad y		
	menores de dieciséis tendrán como jornada máxima la de seis horas.		
	IV. Por cada seis días de trabajo deberá disfrutar el		
operario de un día de descanso, cuando menos.			
	V. Las mujeres durante el embarazo no realizarán		
	trabajos que exijan un esfuerzo considerable y		
	signifiquen un peligro para su salud en relación con la gestación;		
	gozarán forzosamente de un descanso de seis semanas		
	anteriores a la fecha fijada aproximadamente para el		
	parto y seis semanas posteriores al mismo, debiendo		
	percibir su salario íntegro y conservar su empleo y los		
	derechos que hubieren adquirido por la relación de trabajo. En el		
	período de lactancia tendrán dos descansos		
	extraordinarios por día de media hora cada uno para		
	alimentar a sus hijos;		
	VI. Los salarios mínimos que deberán disfrutar los		
	trabajadores serán generales o profesionales. Los		
	primeros regirán en las áreas geográficas que se determinen;		
	los segundos se aplicarán en ramas determinadas de la		
	actividad económica o en profesiones, oficios o trabajos		
	especiales.		
	Los salarios mínimos generales deberán ser suficientes		
	para satisfacer las necesidades normales de un jefe de familia, en el orden material, social XIII. Las empresas,		
	cualquiera que sea su actividad, estarán obligadas a		
	proporcionar a sus trabajadores, capacitación o		
	adiestramiento para el trabajo. La ley reglamentaria		
	determinará los sistemas, métodos y procedimientos		
	conforme a los cuales los patrones deberán cumplir con dicha obligación;		
	XIV. Los empresarios serán responsables de los		
	accidentes del trabajo y de las enfermedades		
	profesionales de los trabajadores, sufridas con motivo o		
	en ejercicio de la profesión o trabajo que ejecuten; por lo tanto, los patronos deberán pagar la indemnización		
	correspondiente, según que haya traído como		
	consecuencia la muerte o simplemente incapacidad		
	temporal o permanente para trabajar, de acuerdo con lo		
	que las leyes determinen. Esta responsabilidad subsistirá		
	aún en el caso de que el patrono contrate el trabajo por un intermediario;		
	XV. El patrón estará obligado a observar, de acuerdo con		
	la naturaleza de su negociación, los preceptos legales		
	sobre higiene y seguridad en las instalaciones de su		
	establecimiento, y a adoptar las medidas adecuadas para		
	prevenir accidentes en el uso de las máquinas, instrumentos y materiales de trabajo, así como a		
	organizar de tal manera éste, que resulte la mayor		
	garantía para la salud y la vida de los trabajadores, y del		
	producto de la concepción, cuando se trate de mujeres		
	embarazadas. Las leyes contendrán, al efecto, las		
	sanciones procedentes en cada caso.		
Art. 2 LFT	- El trabajo es un derecho y un deber sociales. No es	Incorporar la noción de trabajo decente que promueve	
	artículo de comercio exige respeto para las libertades y	la Organización Internacional del Trabajo.	
	dignidad de quien lo presta y debe efectuarse en		
	condiciones que aseguren la vida, la salud y un nivel económico decoroso para el trabajador y su familia.		
	No podrán establecerse distinciones entre los trabajadores		
	por motivo de raza, sexo, edad, credo religioso, doctrina		
	política o condición social.		
	Asimismo, es de interés social promover y vigilar la		
Art. 5 LFT	capacitación y el adiestramiento de los trabajadores. Las disposiciones de esta Ley son de orden público por	Tipificar como delito el trabajo de menores de 14 años	
AILS LEI	lo que no producirá efecto legal, ni impedirá el goce y el	fuera del círculo familiar, para lo cual se otorgan	
	ejercicio de los derechos, sea escrita o verbal, la	facultades a las autoridades, a efecto de que puedan	
	estipulación que establezca:	ordenar el cese inmediato de las labores de aquéllos,	
	I. Trabajos para niños menores de catorce años;	además de establecer la obligación de resarcir las	
	II. Una jornada mayor que la permitida por esta Ley;	diferencias salariales, en caso de que percibieran ingresos menores a los de otros trabajadores que	
	III. Una jornada inhumana por lo notoriamente excesiva, dada la índole del trabajo, a juicio de la Junta de	realicen idénticas actividades.	
	Conciliación y Arbitraje;		
	IV. Horas extraordinarias de trabajo para los menores de	De igual manera, con el propósito de fortalecer las	
	dieciséis años	medidas de protección y vigilancia a favor de los	

Articulo	Actual	Propuesta de Modificación
	<ul> <li>V. Un salario inferior al mínimo;</li> <li>VI. Un salario que no sea remunerador, a juicio de la Junta de Conciliación y Arbitraje;</li> <li>VII. Un plazo mayor de una semana para el pago de los salarios a los obreros;</li> <li>VIII. Un lugar de recreo, fonda, cantina, café, taberna o</li> </ul>	menores, se propone un nuevo esquema para detallar con mayor precisión, los tipos de actividades que no podrán realizar. La inclusión de estos supuestos se apoya en el análisis e identificación de las tareas que potencialmente resultan peligrosas e insalubres.
	<ul> <li>vin. On lugar de cuerco, ionad, cantina, cate, laberta o tienda, para efectuar el pago de los salarios, siempre que no se trate de trabajadores de esos establecimientos;</li> <li>IX. La obligación directa o indirecta para obtener artículos de consumo en tienda o lugar determinado;</li> <li>X. La facultad del patrón de retener el salario por concepto de multa;</li> <li>XI. Un salario menor que el que se pague a otro trabajador en la misma empresa o establecimiento por trabajo de igual eficiencia, en la misma clase de trabajo o igual jornada, por consideración de edad, sexo o nacionalidad;</li> </ul>	En cuanto a los trabajadores del campo, en el artículo 5, fracción VII, se señala que no produce ningún efecto legal la estipulación que establezca un plazo mayor de una semana para el pago de los salarios a dichos trabajadores, así como a los obreros, como lo dice la ley en vigor
Art. 35 LFT	Las relaciones de trabajo pueden ser para obra o tiempo determinado o por tiempo Indeterminado. A falta de estipulaciones expresas, la relación será por tiempo indeterminado.	Nuevas modalidades de contratación en periodos de prueba para trabajadores de nuevo ingreso, capacitación inicial y trabajos de temporada. Indicando que las relaciones de trabajo pueden ser para obra o tiempo determinado, por temporada, de capacitación inicial o por tiempo indeterminado; manteniéndose el mandato de la ley en vigor, en el sentido de que a falta de estipulación expresa, la relación será por tiempo indeterminado.
		<ul> <li>Regular el llamado 'outsourcing' o subcontratación de personal con el propósito de garantizar el cumplimiento de obligaciones de seguridad social y salud a cargo del patrón.</li> </ul>
		<ul> <li>Regular el pago por hora, estableciéndose que para el cálculo del salario en esta modalidad se deberá considerar como pago mínimo el de una jornada de trabajo completa.</li> </ul>
		<ul> <li>El pago de tres meses de indemnización y salarios vencidos al trabajador que haya sido despedido y cuyo patrón no compruebe las causas de rescisión en un juicio laboral.</li> </ul>
		- Obligación para hacer públicos los estatutos de los sindicatos en la página de internet de la Secretaría del
Art. 39 LFT	Si vencido el término que se hubiese fijado subsiste la materia del trabajo, la relación quedará prorrogada por todo el tiempo que perdure dicha circunstancia.	Trabajo. Se adiciona la ley con los artículos 39-A a 39-F, regulándose en el primero el denominado período de prueba, el cual debe hacerse constar por escrito y no podrá exceder de treinta días, salvo tratándose de trabajadores para puestos de dirección o gerenciales y demás personas que ejerzan funciones de administración en la empresa o para desempeñar labores
		técnicas o profesionales, casos en los cuales dicho período podrá extenderse hasta ciento ochenta días. En ambos casos el período de que se trate es improrrogable; debiendo cubrirse al trabajador el salario de la categoría o puesto que desempeñe. De no acreditar competencia el trabajador, se dará por terminada la relación de trabajo, sin responsabilidad para el patrón, pagándose al trabajador las prestaciones devengadas a esa fecha.
Art.83 LFT	El salario puede fijarse por unidad de tiempo, por unidad de obra, por comisión, a precio alzado o de cualquier otra manera. Cuando el salario se fije por unidad de obra, además de especificarse la naturaleza de ésta, se hará constar la cantidad y calidad del material, el estado de la herramienta y útiles que el patrón, en su caso, proporcione para ejecutar la obra, y el tiempo por el que los pondrá a disposición del trabajador, sin que pueda exigir cantidad alguna por concepto del desgaste natural que sufra la herramienta como consecuencia del trabajo.	<ul> <li>Se le adiciona:</li> <li>"Tratándose de salario por unidad de tiempo, el trabajador y el patrón podrán convenir el pago por cada hora de prestación del servicio, siempre y cuando no se exceda la jornada máxima legal en esta Ley".</li> </ul>

### CONCLUSIONES

De acuerdo a la investigación de los distintos conceptos y con la experiencia propia en al ámbito laboral, cada día son mas los empleadores que introducen en el cálculo de las nóminas diversos conceptos utilizados en los planes de previsión social para no generar más carga fiscal de impuesto sobre la renta a través de estrategias fiscales y que por una parte benefician al trabajador al recibir de esta forma se le incremente el sueldo; pero por otra parte, se va perdiendo la esencia de la previsión social al estar atento el patrón al cuidado de no exceder los límites para poder considerar como erogación fiscal en su contabilidad las prestaciones citadas. Bajo la óptica de los distintos señalamientos que hacen referencia a la previsión social, pareciera que se está saliendo de su esencia original de la protección social y como puede observarse, no ha sido muy afortunada la definición, y ello obedece a que la previsión social como una de las modalidades de la protección social no puede apartarse del ámbito que le dio origen ni de la etapa a la cual se integró: la seguridad social.

Debería ser estos momentos en que se sigue discutiendo la propuesta a la reforma laboral en México para lograr una armonización entre las diversas leyes y la propia Ley Federal del Trabajo.De igual forma, derivado de la naturaleza laboral de la previsión social, se considera que la Ley Federal del Trabajo debe incorporar la definición de Previsión Social y acotar conceptos análogos que generan incertidumbre.Se concluye además que este concepto tan relevante y de naturaleza laboral, que la Ley del Impuesto Sobre la Renta no es el ordenamiento jurídico competente para definir el concepto de previsión social; ya que éste ordenamiento conlleva en esencia totalmente fiscal y/o tributario para gravar el ingreso tanto para el empleador como para el trabajador cuando excedan los límites señalados en la misma.El incremento de las "prestaciones de previsión social" en el ámbito fiscal afirma el lento camino para las nuevas generaciones en la regulación de lo "social". Por bien intencionados que sean los intereses de naturaleza fiscal respecto de estas prestaciones, no pueden salirse de su campo original en perjuicio de la reducción de espacios en el terreno de la "protección social". Efectivamente, las deducciones para el empleador están enfocadas a este tipo de prestaciones, intensificándose su uso con las nuevas condiciones y modalidades de contratación, que a mediano plazo de no ser parte de una reforma estructural se resumiría en una perdida de derechos del trabajador.

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# EXPERIENCIA MEMORABLE DE COMPRA EN TIENDAS MUEBLERAS DE LA FRONTERA TIJUANA, B.C. – SAN DIEGO, CA.

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### RESUMEN

Esta investigación tiene como finalidad explicar y conocer como se crea la experiencia memorable de compra en los consumidores de la frontera Tijuana – San Diego en las tiendas departamentales muebleras: Coppel, Elektra y Muebles Dico, en la ciudad de Tijuana, B.C., así como en la tienda Ikea en la ciudad de San Diego, Ca. Para este trabajo se consultaron a los teóricos y teorías que definen el concepto de experiencia memorable de compra, de tal manera que se pudiera categorizar como una herramienta competitiva del Merchandising dentro de las tiendas departamentales muebleras. Se utilizó una metodología no experimental cuantitativa y de tipo transeccional descriptivo. De este último se manejó la técnica de encuestas aplicadas a los clientes de cada una de las empresas mencionadas, entrevista a profundidad con los gerentes de las tiendas ubicadas en Tijuana, B.C., y la técnica de observación participante dentro de los establecimientos. Todo esto con la finalidad de identificar como se genera la experiencia memorable que favorezca la fidelización de los clientes en estas tiendas.

PALABRAS CLAVE: Experiencia memorable de compra, merchandising, tiendas muebleras, fidelización.

### MEMORABLE SHOPPING EXPERIENCE IN FURNITURE STORES OF TIJUANA – SAN DIEGO BORDER.

### ABSTRACT

This research aims to explain and learn how to create memorable shopping experience in to consumers in the border of Tijuana – San Diego in furniture department stores: Coppel, Elektra and Muebles Dico in Tijuana BC; well as in the Ikea store in San Diego Ca. For this work were consulted theorists and theories that define the concept of memorable shopping experience, so that it could be categorized as a competitive tool in the merchandising department stores furniture. It was made through a quantitative non-experimental methodology and transactional descriptive type. This last technique is handling the surveys of customers of each of the companies mentioned, depth interviews with managers of stores in Tijuana B.C., and participant observation technique within establishments. All this in order to identify as generating memorable experience that encourages customer loyalty in these stores.

### **JEL:** M31

**KEYWORDS**: Memorable shopping experience, merchandising, department store furniture, loyalty.

### INTRODUCCION

En los últimos años, los acelerados cambios generaron un nuevo escenario. La oferta disponible y la capacidad de producción para la gran mayoría de las categorías de productos creció exponencialmente; donde antes había sólo unos cuantos fabricantes, hoy hay cientos; las comunicaciones y el transporte han evolucionado, las fronteras geográficas y las barreras físicas son cada vez más tenues, las diferencias culturales entre los pueblos se hacen más homogéneas. El marketing tradicional comenzó a sufrir la ausencia de herramientas, el uso de las cuatro "P" de McCarthy es insuficiente, el enfoque de las economías a escala, la diversificación y extensión de líneas ya no bastan para vender y retener clientes en este nuevo y complejo entorno, ni aún el liderazgo de precios y calidad son suficientes para asegurar el éxito. (Basile, 2008)

La función básica del *merchandising* consiste de exhibir los productos de la manera correcta, de acuerdo a estándares internacionales, con el fin de hacerlos visibles y facilitar su venta. No obstante el sector del autoservicio se ha dado a la tarea de ofrecer un valor agregado al comprador ya que se ha comprobado que la decisión de compra se toma en el punto de venta creando una experiencia memorable de compra en el cliente, por lo cual este canal es muy importante para cerrar el ciclo de marketing. (Carrano, 2009)Carrano (2009) señala que en el proceso de venta en las tiendas departamentales y de autoservicio el *merchandising* se ve imbuido en un sinfín de estímulos sensoriales que lo vuelven cada vez más interactivo, más participativo en el acto de compra.

En la actualidad se observa la tendencia de generar experiencias de compra agradables que estén estrechamente vinculadas a las emociones del consumidor y a su estilo de vida. Ahora se sabe que el consumidor no compra productos, compra experiencias que le ayudan a disfrutar más.Uno de los ejemplos emblemáticos en la región Tijuana- San Diego, de experiencias memorables de compra, es la tienda departamental mueblera Ikea. Ella ha venido a revolucionar el tradicional concepto de mueblerías por un formato de compra autoservicio: funcional, innovador y vanguardista. Además de posicionarse como una opción de compra que ofrece experiencias memorables y singulares creando vínculos de fidelización a la marca.Bajo este tenor la presente investigación se tiene como objetivo general identificar las experiencias memorables de compra que tienen los compradores en empresas muebleras: Ikea, Coppel, Elektra y Dico, y cómo esta experiencia puede contribuir a la fidelización de la marca. También pretende de manera específica 1) conocer las estrategias de *merchandising* de las empresas estudiadas y 2) observar la reacción de los consumidores ante las estrategias de *merchandising*.

El resultado de esta investigación será el de demostrar que puede haber mayor competitividad entre las empresas muebleras de Tijuana, B.C., y desarrollar mejoras con la aplicación de herramientas del *merchandising*, lo que conduciría inevitablemente a un proceso de fidelización con la tienda de parte del consumidor final. Bajo la influencia de este escenario, la prioridad básica de este trabajo se traduce en conocer las herramientas del *merchandising* que permite "generar experiencias para conquistar emociones y fidelizar clientes". Es así como nacen las nuevas tendencias del *merchandising* que fijan la atención en el diseño del punto de venta, la atmósfera y el ambiente; estos elementos son los encargados de resaltar la percepción del producto y del servicio, generando la imagen del punto de venta y convirtiendo al consumidor en un cliente fiel. (Basile, 2008)

### **REVISION LITERARIA**

¿Qué es el *merchandising*? El *merchandising* se define como toda acción destinada a aproximar el producto al consumidor en el punto de venta, con el fin de conseguir una mayor rotación del producto. (Enciclopedia de marketing y ventas, 2011)

El *merchandising* está estrechamente ligado al análisis, estudio y sistematización de los supermercados y su manera de influir en la comunidad, sus hábitos de compra y la consecuencia de todo ello. Macías (2000) informa que el *merchandising* son todos los factores que hacen vender o fijar el sentido de la compra en el punto de venta.

Sin embargo, existe otro tipo de comunicación fuera del punto de venta, que también es propia del *merchandising*: toda aquella que se realiza a través de elementos, debido al uso de estos, pero sin intencionalidad del usuario de efectuar una acción de comunicación. De esta manera, esta actividad es una acción de comunicación que se realiza con esa intencionalidad en el punto de venta y que se efectúa sin intencionalidad fuera de él. (Macias, 2000). Para efectos de esta investigación utilizaremos el concepto de la Enciclopedia de Marketing y ventas (2011) que delimita la denominación de *merchandising* al punto de venta. Por tanto el *merchandising* es una actividad de comunicación que se realiza en el punto de venta mediante elementos confeccionados con ese fin específico y que fuera del punto de venta, se lleva a cabo mediante elementos creados con otra finalidad y sin intencionalidad especifica de comunicar comercialmente por parte de quien exhibe esos elementos. (Enciclopedia de marketing y ventas, 2011) De estas definiciones podemos distinguir algunas especificidades que permiten acotar aún más la definición.

En la actualidad el concepto ha evolucionado y se ha transformado en un conjunto de herramientas interdisciplinarias e innovadoras que permiten al cliente interactuar y relacionarse con el producto de una manera más directa, afectiva y por tanto íntima. Dichas herramientas van desde el clásico exhibidor dentro de la tienda departamental a la conformación de escenarios que simulan realidades para distintos perfiles de consumidor o nichos de mercado, y representaciones teatralizadas donde el factor humano hace la diferencia en términos de estrategias de promoción.

### Elementos Potenciadores Del Merchandising

Garrido (2011) argumenta que, a pesar que el *merchandising* realiza una buena exposición del producto utilizando una serie de elementos que mejoren su exhibición, inherente a él existen toda una serie de procesos que son de vital importancia y que, sin ellos, el *merchandising* perdería una gran parte de efectividad:

- Una buena elección en la ubicación del local, puesto que el perfil del cliente de la zona donde se ubique deberá estar en armonía con los productos ofertados.
- Un buen diseño del punto de venta para optimizarlo y evitar las zonas muertas.
- Una buena gestión de compras, para poder tener siempre todos aquellos productos que necesitan nuestros clientes, sin tener por ello que colmar de mercancía nuestros anaqueles.
- Un buen trabajo de almacenaje de los productos para evitar mermas y tener controladas nuestras existencias.
- Una eficaz gestión administrativa para saber en todo momento la rentabilidad de la tienda.

- Una mezcla estudiada de los productos en el punto de venta, para despertar motivaciones de compra entre los clientes o nichos de mercado.
- Una buena estrategia de promociones, para conseguir que nuestros clientes no caigan en el aburrimiento.

Garrido (2011) comenta que cuando las empresas combinan todos estos elementos del *merchanidising*, se optimizará el negocio y se conseguirá un mayor rendimiento. La cantidad y variedad de elementos que se usan o pueden usarse en acciones de *merchandising* no solo es muy grande, sino que también abarca un espectro que sobrepasa los límites de una técnica de comunicación y se extiende a actividades que normalmente se podrían encuadrar en otros contextos, de comunicación o no, tales como promoción, construcción, relaciones públicas, decoración etc. En su libro Comunicaciones de Marketing, Oscar Pedro Billorou (1991) menciona las siguientes características del *merchandising* como imprescindibles en los puntos de venta:

- Elementos de comunicación dentro del punto de venta como los carteles, las cenefas, los colgantes y móviles, los salientes, afiches y pósters por mencionar algunos elementos publicitarios; además de *displays* corpóreos o exhibidores de productos, espejos, ceniceros y material relativo al local así como la lista de precios de los productos ofrecidos.
- Elementos de prueba de producto que generen una experiencia agradable y comprobable del funcionamiento óptimo de la mercancía, como frascos con vaporizador para pruebas de productos, dosificadores, probadores, expendedores de cualquier tipo.
- Posiciones atractivas de la mercancía en el punto de venta que permita a los clientes identificar los bienes de temporada, o los más vendidos, y que permiten identificar las zonas calientes y las zonas frías del local, las áreas más concurridas o que generan más tránsito, esto con la finalidad de optimizar todos los espacios interiores de la tienda.
- La distribución del local que sea atractiva para hacer la visita al negocio una real experiencia memorable, los elementos a utilizar son los propios de la construcción, la decoración y el equipamiento del local de ventas. Los elementos de comunicación utilizables son, en caso necesario los que puedan proveer de adecuada señalización dentro del local, así como también instruir sobre modalidades de compra, finalización, estacionamiento, entregas, horarios, etc.

Por su parte, Diamond (1999) plantea que existe un tipo de *merchandising* denominado visual y se define como la presentación de una tienda y de su mercancía de forma que atraigan la atención de los clientes potenciales por medio del sentido de la vista y que los motiven para que compren.La tarea del *merchandising* visual es lograr los mejores efectos visuales posibles, requiriendo de una combinación de habilidades. Desde luego se necesita creatividad pero también un sentido de orden, cumpliendo con los principios del diseño y disciplina personal para obedecer las instrucciones.

El *merchandising* visual se ocupa principalmente de los aspectos creativos de su especialidad y de presentar la mercancía en una atmósfera que maximice las ventas a través de coordinar todos los componentes del aparador y de los interiores, así como producir los *displays* que realzarán la imagen de la tienda y la distinguirán de sus competidores. (Jay, 1999) . Una vez determinados las herramientas y utilería que se usará, se examinan los principios fundamentales del diseño, la conceptualización del color, la iluminación, que al mismo tiempo que alumbra produce atractivos efectos, y los anuncios que

complementan el escenario. El producto terminado habrá de captar la atención de los posibles compradores y transformarlos en clientes.

Cervera (2008) señala que hay dos nuevas estrategias y herramientas que apoyan al punto de venta para hacer efectiva la decisión de compra: el Retailtainment y el Marketing Relationship Magnament. El Retailtainment consiste en obtener un vínculo estrecho con la marca a partir de eventos que entretengan al comprador, con el objetivo de que éste visite de manera frecuente la tienda, y compre el producto por volver a vivir esta clase de vivencias. Las actividades de entretenimiento se pueden llevar a cabo tanto por el detallista como por el fabricante. "Va desde una sala de estar en donde puedan relajarse entre cada compra hasta verdaderos carnavales. La experiencia que consigues envuelve al consumidor en un factor sorpresa y lo predispone a querer más de tu marca, lo cual se traduce en una compra". Destaca Chemor directora de Ogilvy Action. (Cervera, 2008) El Marketing Relacional involucra un conocimiento profundo del cliente, utilizando el poder de la marca para transmitir beneficios de autoexpresión, el poder de las personas para conocer y establecer vinculaciones y relaciones valoradas por el cliente. Va más allá, de la simple estrategia centrada en el producto, sus atributos y beneficios y se concentra ahora en la organización enfocada en el cliente, en la cultura organizacional necesaria para vivir todos los días con criterio comercial y teniendo en consideración el único punto de vista indiscutiblemente válido: el cliente. Kotler y Armstrong (2008) explican que un factor clave que se debe conocer en el punto de venta es el comportamiento del consumidor final, las empresas deben conocer tanto la teoría como la práctica del comportamiento de compra del consumidor; pues este comportamiento se ve afectado por factores culturales, sociales, personales y psicológicos. Es tarea del mercadólogo identificar el tipo de influencia que ejercen estos factores para crear las estrategias de merchandising correctas.

### Experiencia Memorable

Emanuel Medina (2010) en su artículo experiencias memorables acota: "Todo el sector del *marketing* tiende a orientarse a proporcionar experiencia emocionales y no solo productos tangibles o materiales". Ahí se explica: la exposición diaria del público a centenares de impactos comerciales propicia que las marcas busquen nuevas formas de cohesión emocional para con sus consumidores. Existe desde hace varios años un área determinada, el *experiential marketing*, que no solo motiva a realizar la compra sino que además; crea una identificación personal con la marca, genera lazos importantes quedan como resultado a largo plazo, rentabilidad y fidelidad de marca.

Medina (2010) cita a Fernando Valdés Tena & Co, el cual comenta: "el arte de crear una vivencia memorable, gratificante y significativa, cuya importancia radica en que el resultado esperado sea la conexión emocional con un consumidor / cliente para la marca, producto, causa o idea a comunicar". Cabe destacar que este tipo de estrategia no es fácil de llevar a cabo pues no solo basta con tratar de involucrar al cliente para que pruebe, sienta o perciba cierto producto o marca. La idea es crear, en realidad un ambiente cercano o igual al contexto que cada anunciante requiere. Para ello Medina (2010) nos brinda un panorama en el cual acota: "para no perderse en esta estrategia se necesita conectar de manera holística los sentidos con las marcas, utilizando técnicas de *merchandising* que ya se conocen. Las experiencias solo ocurren como respuesta a una estimulación, se desarrollan con base en algo específico y siempre referirán a ello". Con este marco de referencia, se realiza este estudio sobre la situación actual de las empresas muebleras Muebles Dico, Elektra y Coppel en la ciudad de Tijuana y la compañía Ikea en la ciudad de San Diego, para conocer las estrategias de *merchandising* que utilizan cada una de ellas y si es que dichas estrategias generan la fidelización a la marca respectiva. Se definió la siguiente hipótesis: La experiencia memorable de compra, como factor primordial de merchandising vivencial, favorece la fidelidad de los clientes en tiendas departamentales muebleras: Ikea, Elektra, Coppel y Dico.

### METODOLOGIA

El diseño de esta investigación constará de elementos y procedimientos cuantitativos, será no experimental, ya que no manipula reacciones, fenómenos u objetos. Será de tipo descriptivo transeccional porque recolectará datos de los que realizará interpretaciones, análisis y pronósticos en un momento determinado.

### Muestra Y Herramientas De Recolección De Datos

Para conocer el grado de experiencia memorable que tienen los clientes de la ciudad de Tijuana al hacer sus compras en las empresas muebleras de la frontera Tijuana – San Diego, de determinó la muestra de acuerdo con la siguiente información: se cuenta con un universo de 470,203 familias en Tijuana, Baja California. Dato recabado de la página oficial de INEGI (2010). Se dividió el universo en una tabla de porcentaje de nivel socioeconómico de la página electrónica de AMAI y se tomó solo las clases C+, C, D+ Y D, que representan el 84.55%. Teniendo como universo final 397,322 familias en Tijuana, Baja California.

Tabla 1: Porcentaje de niveles económicos en México.

Clase social	Porcentaje
A/B	7.5%
C+	13.6%
C-	18.8%
D+	32.6%
D-	19.5%
E	8%

La clase social alta o A/B tiene un porcentaje de 7.5%, la clase media superior o C+ tiene un porcentaje de 13.6%, la clase media inferior o Ctiene un porcentaje de 18.8%, la clase baja superior tiene un porcentaje de 32.6%, la clase baja inferior o D- tiene un porcentaje de 19.5%, la clase denominada autoconstrucción o E tiene un porcentaje de 8%. Fuente AMAI 2012.

Una vez que se obtuvo el dato del universo se procedió a determinar la muestra. Según Fisher y Espejo (2004) cuando el universo es menor a 500, 000 elementos, se debe utilizar la muestra en poblaciones finitas. Fórmula para Poblaciones finitas:

 $N = z^2 N pq / e^2 (N-1) + z^2 pq$ 

(1)

En donde:

z= nivel de confianza

n= universo o población

p= probabilidad a favor

q= probabilidad en contra

e= error de estimación (precisión de los resultados)

N= número de elementos (tamaño del universo)

Sustitución de la fórmula:

n= i? e= 5% z= 1.96 (al cuadrado = 3.84) p= 50% q= 50% N= 397, 322 N= (3.84) (397,322) (.50) (.50) / (.05)2 (397,322 - 1) + 3.84 (.50) (.50) = 381,429.12 / 994.26 = 383.63 Total de encuestas a realizar = 383 Las encuestas se hicieron a clientes seleccionados de forma aleatoria de las empresas a investigar, Elektra, Coppel y Muebles Dico en la ciudad de Tijuana. La encuesta se orientó a identificar:

- El motivo de compra de los clientes.
- Cuál fue el impulso de compra que orilló a elegir ese lugar para la adquisición de sus muebles.
- La frecuencia de compra de los clientes.
- El grado de posicionamiento de las tiendas muebleras
- El grado de satisfacción de los clientes con relación al servicio brindado por los asesores en el punto de venta.
- Si la señalética de la compañía es adecuada para facilitar la localización.
- El grado de satisfacción después de la compra.

Para conocer la experiencia de compra de los clientes de la ciudad de Tijuana con respecto a la tienda Ikea, se utilizó una muestra a juicio identificando a personas que compraron en Ikea durante el año 2011 y 2012, a las cuales se les aplicó una encuesta vía internet, haciendo uso de las redes sociales (*Facebook*), la encuesta se adjuntó dentro la red social. El total de encuestas realizadas fue a 97 clientes y/o compradores de la tienda Ikea. La encuesta tuvo la misma orientación que la que se aplicó de forma presencial. Se determinó una tercera muestra a juicio para complementar la información, en donde se identificó a las personas encargadas de la gerencia de las tiendas Elektra, Coppel y Muebles Dico, a quienes se les hizo una entrevista a profundidad para identificar los siguientes puntos:

- Conocer las estrategias de *merchandising* que utilizan en el punto de venta.
- Saber la periodicidad o frecuencia con la que cambian sus estrategias de *merchandising*.
- Conocer qué tipo de herramientas visuales Point of Purchase de merchandising utilizan.
- Conocer el tipo de señalética que manejan dentro del punto de venta y sus alrededores.
- Tener un panorama general de la infraestructura del lugar (iluminación, humedad, ventilación, alturas, espacio, colores, tipo de suelo y acomodo).

El último método para recolectar información que se utilizó fue la observación directa que consiste en observar el establecimiento a detalle, teniendo como guía una hoja de revisión, la cual contiene los parámetros que ayudaron a evaluar la situación. Para este método se tomaron como muestra las mismas sucursales en donde se encuestaron a los clientes/ consumidores de las tiendas, Coppel Boulevard 2000, (Coppel, 2010) Elektra sucursal Brisas y Muebles Dico sucursales Macro Plaza y Plaza Monarca (Muebles Dico, 2012), todas ellas ubicadas en Tijuana, Baja California. La guía de observación que se utilizó busco identificar lo siguiente:

- Características físicas de la empresa.
- Accesibilidad al establecimiento.
- Servicio al cliente.
- Aspecto del lugar.

- Tipos de herramientas de *merchandising* utilizadas en punto de venta.
- Señalética dentro del punto de venta.
- Distribución y acomodo del lugar del punto de venta.

## RESULTADOS

#### Resultados generales de las tiendas Elektra, Coppel y Muebles Dico

Con base en la información procesada, la muestra de las personas encuestadas durante la visita a las tiendas Elektra, Coppel y Muebles Dico mostró lo siguientes resultados:

El 51% de los clientes que visitan estas tiendas son hombres y 49% mujeres El 72% de los clientes son casados o se encuentran en unión libre, mientras el 20% son solteros, el resto no respondió. La zona donde viven con mayor audiencia es la Mesa con un 61% y en segundo lugar la zona de la Presa siendo el lado Este de la Ciudad el que más concurre a esta tienda. Lo que les resulto más atractivo para ir a esa tienda fue con un 34% la línea de crédito, con un 28% el servicio, con un 20% la calidad de los productos y con un 18% el precio. Los medios que más influyeron para asistir a esta tienda fue con un 65% los anuncios televisivos y con un 27% los espectaculares, el 8% mencionó que medios electrónicos.

El 61% de los clientes en el momento de la compra se sintieron relajados y confiados mientras el 33% se encontró alegre y emocionado en el momento de la compra y solo el 6% se sintió presionado y aturdido. La apariencia del lugar tuvo una evaluación de un 47% como limpia, un 28% como muy limpia y un 25% como desordenada. En el acomodo de la mercancía el 53% menciono que se sintió poco atraído, el 45% le atrajo mucho y el 2% nada. Un 80% de los clientes les fue fácil localizar el producto que buscaba, mientras el otro 20% no. El 68% de los clientes mencionó que la exhibición de lo productos en la tienda le ayudaron mucho a imaginar cómo se vería el mueble en su casa, el 28% menciono que el acomodo le ayudó poco, mientras el 4% restante menciono que nada.

El 87% de los clientes mencionan que si se les permitió tocar, ver y probar su producto antes de adquirirlo, mientras el 13% restante comenta que no. El 41% de los clientes nos dice que ha comprado en esa tienda de 1 a 2 muebles, el 33% de 3 a 4, el 13% de 5 a 6 y el 9% de 4 a 5, el 4% fue la primera vez que visitó alguna de esas mueblerías. Al recordar su experiencia de compra, lo que más recuerdan los clientes con más agrado es el trato con el vendedor, el poder tocar, medir y probar su producto antes de la compra y la confianza que le brindaron los vendedores de la tienda. Al recordar la experiencia de compra, lo que más recuerdan los clientes como desagrado es, la escasa publicidad, el acomodo de los productos y el no haber libre acceso a todos los espacios de venta. Las tres principales variables por las que se motivaron a regresar fueron: el servicio, la novedad en sus mercancías y el acomodo de las vitrinas y escaparates.

### Resultados generales de la tienda Ikea

El 42% de los clientes de la tienda son hombres y el 58% mujeres. El 36% de los clientes son casados o se encuentran en unión libre, mientras el 36% son solteros. La zona donde viven se encuentra dividida en un 26% la Presa, 25% la Mesa, 21% Otay, 14% playas y por último 14% en zona Centro. Siendo esta la tienda con la mayor variante de zonas donde viven sus clientes. Lo que les resultó más atractivo para ir a esa tienda fue con un 48% la calidad, 30% el precio, 13% el servicio y solo el 9% la línea de crédito. Los medios que más influyeron para asistir a esta tienda fue con un 43% los anuncios televisivos y con un 13% los espectaculares y con un 21% medios impresos y por ultimo 23% internet.

El 73% de los clientes en el momento de la compra se sintieron relajados y confiados mientras el 27% se encontró alegre y emocionado en el momento de la compra. La apariencia del lugar tuvo una evaluación

de un 58% como limpia, un 42% como muy limpia. En el acomodo de la mercancía el 73% se sintió atraído, mientras el 27% poco. Un 84% de los clientes les fue fácil localizar el producto que buscaba, mientras el otro 16% no. En la forma en cómo se encontraba acomodado el producto, ayudo a imaginar a el cliente como se vería en su lugar donde lo utilizará, el 61% mencionó que mucho, y el 30% mencionó que poco, el resto no respondió. El 83% de los clientes mencionan que si se les permitió tocar, ver y probar su producto antes de adquirirlo, mientras el 17% restante comenta que no. El 38% de los clientes nos dice que ha comprado en esa tienda de 3 a 4, el 29% de 1 a 2, el 22% de 5 a 6, y el 11% de 4 a 5. Siendo esta la tienda con mayor frecuencia de compra por parte de sus clientes. Al recordar su experiencia de compra, lo que más recuerdan los clientes con más agrado es el acomodo de la mercancía, en segundo la oportunidad de poder tocar, medir y probar su producto antes de la compra y por último poder pasear por la tienda. Al recordar la experiencia de compra, lo que más recuerdan los clientes compra, lo que más recuerdan los vendedores. Las tres principales variables por las que se motivaron a regresar fueron: el servicio, la novedad en sus mercancías y el acomodo de las vitrinas y escaparates.

#### Resultados De Entrevistas A Profundidad A Gerentes De Elektra, Coppel Y Muebles Dico

En general las respuestas se agruparon para presentarse de la siguiente manera: Las estrategias de *merchandising* que se utilizan en el punto de venta son: la ambientación y escenificación de algún espacio del hogar, se integran carteles, posters y adornos que no son del producto; pero que realzan la temática vertida en el punto de venta. Estas estrategias se actualizan según la temporada, en promedio cada cuatro meses se cambia la imagen y acomodo de los productos. Los instrumentos de comunicación Punto de Venta que se utilizan, son los carteles horizontales por los pasillos y espacios libres del punto de venta, cenefas con precios y catálogo de productos agregados para incluir en la decoración del hogar.

La señalética que se utiliza en los lugares varía de acuerdo al acomodo de la mercancía, pero en todas las tiendas están bien identificados los departamentos con sus mercancías, así como los requerimientos legales. Además el punto de venta cuenta con la iluminación general de las lámparas que iluminan toda la tienda, y a su vez algunos cuentan con lámparas individuales que son parte de la decoración y ambientación del lugar. Muchas veces las lámparas son productos también a la venta al público. Las tiendas utilizan escaparates para atraer a los clientes y apoyar la venta, éstos son realizados de acuerdo al área dónde se encuentra la tienda, pues la segmentación del mercado en aspectos geográficos muestra un tipo de cliente diferente en los diferentes puntos de la ciudad.

#### Resultados de la observación directa

Se comprobó el uso de las estrategias de *merchandising* en las tiendas, los escaparates en todas sus tonalidades son los atractivos de las tiendas, así como la señalética y el decorado adecuado de las tiendas son un punto de interés para los clientes. Se pudo observar una afluencia muy grande de clientes en las tiendas Elektra y Coppel, pues éstas tiendas se caracterizan por vender a crédito la mercancía y los clientes hacen sus pagos de forma semanal o quincenal, cabe señalar que la caja que recauda dicho pago, se encuentra al final de la tienda obligando a los visitantes a recorrer el negocio casi en su totalidad. El acomodo de la mercancía inspira al cliente a la compra, pues se eligen decorados adecuados para los tipos de muebles que las compañías promocionan.

## CONCLUSIONES

Los objetivos de esta investigación se cumplieron al: Identificar experiencias memorables de compra, en empresas muebleras: Ikea, Coppel, Elektra y Dico, a través de una encuesta aplicada a los clientes de estas tiendas, con las preguntas clave dentro de la encuesta donde se les pregunta cómo se sintieron en el momento de la compra en el cual encontramos que el promedio de las cuatro empresas es de 67.25% los

cuales se sienten relajados y confiados a la hora de adquirir sus productos, además que el servicio es de las prioridades para los clientes, el cual es importante para hacer regresar al cliente y cómo estas variables contribuyen a la fidelización de la marca. Se examinaron las estrategias de *merchandising* de las empresas estudiadas, a través de una entrevista a profundidad, en las cuales encontramos que las empresas Coppel, Elektra y Muebles Dico, cuentan con estrategias de *merchandising* visual y que estas están diseñadas en una matriz la cual se encarga de dar el material promocional del punto de venta a las demás sucursales a nivel nacional. Conocer la reacción de los consumidores ante las estrategias de *merchandising*, para lo cual se generaron preguntas dentro de la encuesta y resultó que los consumidores son atraídos por los escenarios y formas en cómo está organizado el lugar, y cabe destacar que estas empresas aunque cuentan con una experiencia memorable de compra, no la desarrollan conscientemente y plenamente ya que como se mencionó en el marco teórico, para implementar la experiencia memorable de compra deben fusionarse las herramientas del *merchandising* como la visual, el *Retailtainment* y el CRM, y estas empresas solo implementan una o dos pero no se encuentran ligadas entre sí.

La hipótesis planteada como "la experiencia memorable de compra como factor primordial de *merchandising* vivencial, favorece la fidelidad de los clientes en tiendas departamentales muebleras: Ikea, Elektra, Coppel y Dico" se comprobó gracias a la encuesta aplicada a los clientes de las empresas, una de las preguntas de esta encuesta plantea: ¿Cuántos muebles ha comprado en esta tienda?, lo que deseábamos conocer a través de esta pregunta es la frecuencia con la que los clientes de las empresas, regresan a comprar productos en dichas sucursales, y así conocer la fidelidad que tienen con la empresa de parte de los clientes. Los resultados fueron el 41% de los clientes nos dice que ha comprado en esa tienda de 1 a 2 muebles, el 33% de 3 a 4, el 13% de 5 a 6 y el 9% de 4 a 5, el 4% fue la primera vez que visitó alguna de esas mueblerías.

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# LA GESTIÓN DEL CONOCIMIENTO COMO ELEMENTO DE COMPETITIVIDAD EN LA INDUSTRIA MANUFACTURERA EN AGUASCALIENTES

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## RESUMEN

La investigación se realizó vía encuesta a los gerentes de pequeñas empresas en el Estado de Aguascalientes, la muestra consistió en 159 empresas. Para el análisis de los datos se utilizó el análisis factorial y de regresión. Los resultados permiten identificar la magnitud de la influencia de la gestión del conocimiento, la actividad innovadora, los esfuerzos sobre responsabilidad social, la eficiencia productiva y los mecanismos de control financiero. Una de las principales contribuciones se da al identificar a la innovación en la gestión empresarial como elemento sustantivo para incrementar la competitividad empresarial. En segundo término se identificó a la gestión del conocimiento como factor que potencializa la mejora competitiva.

PALABRAS CLAVES: Innovación, Competitividad, Gestión del Conocimiento

## KNOWLEDGE MANAGEMENT AND COMPETITIVENESS IN MANUFACTURING EN AGUASCALIENTES

## ABSTRACT

The research was conducted via survey of managers of small businesses in the State of Aguascalientes, the sample consisted of 159 companies. For the analysis of the data was used factor analysis and regression. The results allow to identify the influence of knowledge management, innovation activity, social responsibility efforts, production efficiency and financial control mechanisms. One of the main contributions was identify innovation in business management as an essential element for increasing business competitiveness. Second was identified knowledge management as a factor that potentiates the competitive improvement.

**KEY WORDS:** Innovation, Competitiveness, Knowledge Management

## INTRODUCCIÓN

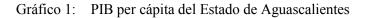
Aguascalientes, con poco más de 1 millón de habitantes, se ubican en el lugar número 28 en cuanto a población a nivel nacional, con una tasa de crecimiento media anual de 2.1 % En cuanto a aspectos económicos la proporción de la población de 14 años y más en edad disponible para la actividad económica es de 57.4%, (por debajo de la media nacional).En el presente trabajo de investigación se analizaron empresas de manufactura (PYMES) en Aguascalientes, asumiendo su importancia por los empleos generados, el número de empresas y la magnitud de actividad económica.

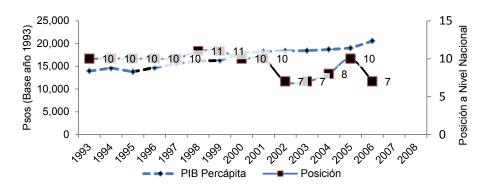
Rama económica	Lugar nacional
Fabricación de equipo de comunicación	2
Fabricación de maquinaria y equipo para el comercio y los servicios	2
Fabricación de componentes electrónicos	3
Fabricación de automóviles y camiones	5
Autotransporte de carga especializado	5
Confección de prendas de vestir	8
Fabricación de partes para vehículos automotores	10
Fabricación de productos de plástico	13

Tabla 1: Principales Ramas Económicas y su importancia en Aguascalientes

Fuente: Elaboración propia con datos de (INEGI, 2009)

Cuando se evalúa la situación competitiva de las empresas, surge la necesidad de analizar el entorno económico, aunque según González (2009) no siempre se le da la importancia correspondiente; primero porque es el resultado de la interacción de muchas variables, tanto de orden interno a la empresa y de aquellas que están presentes en el entorno empresarial. Cuervo (2004) sostiene que la creación de riqueza y el dinamismo de un país se ubican sobre la competitividad de sus empresas, lo que da pie a que los investigadores en ciencias económico- administrativas profundicen al respecto. En este sentido se realiza la presente investigación, con el objetivo de identificar la magnitud de la influencia de la gestión del conocimiento, la actividad innovadora, los esfuerzos sobre responsabilidad social, la eficiencia productiva y los mecanismos de control financiero. Aguascalientes es uno de los Estados más pequeños y su Producto Interno Bruto neto siempre debe ser valorado a la luz de la cantidad de habitantes.





#### Fuente: (INEGI, 2010)

#### Discusión Teórica

Martelo, Barroso, y Cepeda (2011) sugieren que cada vez más empresas entienden el valor para el cliente como un factor clave a la hora de buscar nuevas formas de lograr y mantener una ventaja competitiva. Debido a que crear valor conlleva la capacidad para implantar combinaciones de recursos que permitan desarrollar competencias y conocimiento, y que sean capaces de incrementar la eficiencia alcanzada en el uso de los recursos presentes en el sistema Ello significa que en esencia el trabajo estratégico de los directivos es entender el entorno competitivo, (Dess & Lumpkin, 2003), (Bateman & Snell, 2004), y (Hill & Gareth, 2009) entre otros citan a (Porter, 1980), (Porter, 2008) como uno de los principales exponentes del análisis de las fuerzas competitivas, el punto de vista de Porter es que existen cinco fuerzas que determinan las consecuencias de rentabilidad a largo plazo de un sector industrial o país, la idea subyacentes es que la empresa debe evaluar sus objetivos y recursos frente a éstas cinco fuerzas que rigen la competencia industrial. Aunque Porter no hace referencia a competitividad específica para empresas.

En primer lugar hay que reconocer que existen una fuerte relación entre la estrategia adoptada por la empresa y el entorno empresarial donde desarrolla sus actividades siguiendo la idea de

Nacional	Micro	Pequeña	Pequeña Mediana		
Unidades económicas	3,550,472	147,435	30,142	7,298	
	95.1%	3.9%	0.8%	0.2%	
Personal ocupado	8,418,441	3,032,770	3,126,380	5,677,135	
	41.6%	15.0%	15.4%	28.0%	
Aguascalientes	Micro	Pequeña	Mediana	Grande	
Unidades económicas	38503	2,068	402	91	
	93.8%	5.0%	1.0%	0.2%	
Personal ocupado	98,992	42,628	41,159	63,583	
	40.2%	17.3%	16.7%	25.8%	
Empresas en el Estado 41,064	24	eneran: 46,362 npleos	PYME'S 2,470 empresas 83,787 empleos		

Tabla 2: Principales Ramas Económicas y su importancia en Aguascalientes

Fuente: Elaboración propia con datos de la Secretaría de Economía

Markides (1999), para lo cual definirá cuáles son las características internas de la empresa que podrán ser utilizadas para la generación de ventajas competitivas. La responsabilidad social se ha presentado como una teoría ideológica donde en lo individual, grupal y organizacional existe una relación de correspondencia entre las actividades y la forma de proceder con respecto al medio ambiente y a la sociedad. Según (Pierick & Beekman, 2004) Responsabilidad Social es la configuración, en una empresa, de los principios de responsabilidad social, los procesos, las políticas, programas y resultados observables que se relacionan con el entorno social. Aunque a veces los esfuerzos se centran en la responsabilidad social a través de la caridad, la sostenibilidad, el cuidado del medio ambiente o impulso y mantenimiento de la paz social. Tales esfuerzos no implican la asignación de liderazgo empresarial, pero son elementos positivos para la relación que se establece entre empresarios, las instituciones de gobierno y la propia comunidad donde se realizan las actividades económicas. (Sandoval, 2011) Manteniendo la atención en los tres grupos básicos a considerar en la Responsabilidad Social, Economía, Sociedad y Medio Ambiente (ECODES, 2003). Según esta definición, ser socialmente responsable va más allá de cumplir estrictamente la legislación en los países en donde opera la empresa. Se trata de invertir más y mejor en aspectos tales como: el desarrollo del capital humano, la protección medioambiental o el fomento de las sociedades donde la empresa realiza sus actividades.

Significa aprovechar las oportunidades que esta visión ofrece para mejorar la competitividad e, incluso, identificar nuevas oportunidades de negocio. Autores como Huerta & Navas (2006), señalan que la entrada de una empresa hacia nuevas líneas de actividad, a través del desarrollo de procesos de negocios internos o adquisición, ocasiona cambios en su estructura administrativa, sistemas y otros procesos directivos.Según Orero (2006) el gerente con mayor potencial para hacer que su empresa sea eficiente y perdure en el tiempo fija su atención en:

- Mayor impulso a la formación, no sólo con una orientación tecnológica de los recursos humanos, sino también de gestión económica y empresarial.
- Una mayor intensificación de la colaboración y de la coordinación entre las diversas instituciones que impulsan el desarrollo del conocimiento en las nuevas tecnologías de información.

- Adecuar rápidamente las instituciones de asesoramiento e información para el desarrollo de las actividades gerenciales.
- Un sistema de gestión de calidad que sea proactivo y sea inclusivo, es decir la calidad se produce desde la entrada de la primera materia prima.
- Mantener un nivel de compromiso por parte del responsable de mantenimiento de equipos, involucrándolo en los logros de la organización y haciéndolo participe de los inconvenientes por demoras en la operación.

Zahra & Covin (1994), fueron pioneros al analizar la relación existente entre la innovación tecnológica y los resultados empresariales, identificando conceptos como la estrategia tecnológica, el liderazgo tecnológico, los recursos tecnológicos y las inversiones realizadas como factores que determinan los resultados empresariales. Por su parte Arbussà, Bikfalvi, y Valls (2004), señalan la generación de patentes como elemento diferenciador en la manera en que cada empresa asume una posición estratégica con respecto a la innovación, por considerarla como una estrategia de protección frente a competidores y posibles entrantes al sector y consiste en el desarrollo por parte de las empresas de un tipo de conocimiento tácito, de contexto específico, para dificultar su transmisión, y mantener así su ventaja competitiva. Según la investigación realizada por Weinzimmer, Nystrom, y Freeman (1998) una de las variables más comunes para identificar el comportamiento de la variable crecimiento está relacionada con el aumento en ventas. Debido más a un concepto de verificabilidad y practicidad en su medición. Para tal efecto se utilizan también elementos que provienen del análisis financiero como son:

- Flujos de efectivo.
- Tasa de Retorno de inversión
- Tasa de rotación de inventarios.
- Índices de aumento de actividad productiva.

La vía más usual para alcanzar el objetivo del crecimiento según Blázquez *et al* (2006) es la de tratar de obtener la mayor rentabilidad posible de los recursos internos de la empresa, a través del aumento de la productividad. Estas mejoras unidas a un mayor esfuerzo comercial conducen a un crecimiento de la propia empresa; en este caso el crecimiento se denomina interno u orgánico. Por otro lado, existe la posibilidad de alcanzar un mayor tamaño de la empresa a través de fusiones, concentraciones, absorciones y acuerdos de cooperación o alianzas con terceras empresas. En este caso se habla de crecimiento externo. Sin embargo persiste la dificultad de encontrar una línea de pensamiento donde confluyan la mayoría de los conceptos y de donde se pueda establecer una teoría clara que delimite los alcances y las relaciones que puedan existir entre cada variable involucrada.

## METODOLOGÍA

La presente investigación es de tipo correlacional y se realizó en la ciudad de Aguascalientes con una muestra de 159 PYMES manufactureras (la ubicación de las empresas surgió de diferentes fuentes como el SIEM de la Secretaría de Economía, el listado de empresas ubicadas en los diferentes parques industriales y la información que se obtuvo de la CANACO y CANACINTRA en Aguascalientes), a las cuales se les aplicó un cuestionario validado mediante alfa de Cronbach (0.89) con 70 reactivos (88% en escala de Likert siendo 1 totalmente en desacuerdo y 5 corresponde a totalmente de acuerdo) y las restantes en preguntas dicotómicas. Las variables a medir son las actividades de responsabilidad social, la percepción de competitividad, la posición financiera (vía indicadores), el posicionamiento estratégico y la actividad innovadora. Primero se obtiene la correlación entre las variables, luego se utilizan los métodos de regresión (lineal y curvilínea) y el análisis factorial recomendado por Vences (1999) y Arribas (2004). La intención es determinar las características de influencia y relación entre las variables.

## HIPÓTESIS

- H<sub>1</sub>: Incrementar los esfuerzos de Innovación tiene un impacto positivo en la Competitividad.
- H<sub>2</sub>: Incrementar los esfuerzos de Gestión del Conocimiento tiene un impacto positivo en la Competitividad.

### RESULTADOS

La obtención de información vía encuesta requiere de cumplir algunos supuestos estadísticos como la normalidad y un elevado índice del alfa de Cronbach tal como recomiendan Pimienta (2000), Rodríguez (2006) y Malhotra (2008). De manera que el instrumento obtuvo un alfa de Cronbach de 0.89 (Oviedo & Campo, 2005) y las pruebas de normalidad cumplieron con el criterio (K-S) Kolmogórov-Smirnov. Falta señalar que las respuestas obtenidas fueron normalizadas utilizando el algoritmo de sustracción de la media poblacional y diviéndolas entre la desviación standard (Malhotra, 2008). Con ello se logra obtener valores que carecen de dimensión y su interpretación se simplifica, en el caso de que se deseara evaluarlas en términos de los resultados de la encuesta se deberá regresarlas a la puntuación de 1 a 5.En primer término se calcularon las correlaciones entre las variables para confirmar que exista relación entre variables esta dado por 0.40 para las variables innovación y gestión del conocimiento. Siendo todas significativas a 0.05

G\_CONC G\_CONC

Gráfico 2: Correlación entre variables

Fuente: Elaboración propia usando Statgraphics ver. 16.1

Despues de realizar el análisis de correlación se procedió a realizar el análisis de componentes principales donde Pérez y Medrano (2010) describen ampliamente la utilidad del análisis factorial desde el punto de vista de simplificar las cargas factoriales como elementos para posteriormente definir la importancia dada a las variables. En este estudió resultó que la mayor carga factorial correspondió al concepto de involucramiento en las actividades de responsabilidad social llevadas a cabo por la empresa. De la misma forma el menor valor correspondió a la expectativa de los propios gerentes sobre los posibles beneficios de llevar a cabo dichas acciones.

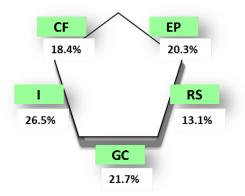
	Carga Factorial				
Gestión de Conocimiento	0.015	0.067	0.183	0.859	0.096
	0.455	0.596	0.188	0.421	0.091
	0.031	0.176	0.126	0.858	0.003
	0.690	0.249	0.168	0.421	0.005
Innovación	0.945	0.173	0.145	0.012	0.051
	0.935	0.159	0.206	0.069	0.071
	0.877	0.163	0.280	0.143	0.066
Responsabilidad Social	0.228	0.591	0.146	0.381	0.374
	0.428	0.699	0.333	0.053	0.107
	0.077	0.609	0.339	0.116	0.464
	0.136	0.033	0.011	0.045	0.872
	0.258	0.532	0.603	0.213	0.047
Eficiencia Productiva	0.212	0.221	0.866	0.081	0.083
	0.265	0.312	0.827	0.080	0.070
	0.081	0.253	0.720	0.377	0.242
Control	0.314	0.631	0.292	0.312	0.145
Financiero	0.367	0.778	0.343	0.023	0.039

Tabla 3: Origen de Lineamientos / Descripción

Fuente: Elaboración propia usando Statgraphics ver. 16.1

Con la magnitud de las cargas factoriales y siguiendo los procedimientos realizados por De la Garza (1999), Aguilera et al (2011a) y Aguilera, González, y Rodríguez (2011b) se definieron las cargas porcentuales que expresan la importancia otorgada a cada uno de los factores. Se utilizó el método de componentes principales (1 sólo factor vía autovalores), con un KMO (Kaiser-Meyer-Olkin) de =0.914 y una varianza total explicada del 81%

Gráfico 3: Transformación de cargas factoriales a peso porcentual



Fuente: Elaboración propia usando Statgraphics ver. 16.1

Al haber realizado la interpretación del peso porcentual otorgado a las variables, se procedió a determinar la relación vía regresión curvilínea, puesto que una aproximación lineal no permite obtener conclusiones estadísticamente significativas del comportamiento de las variables.

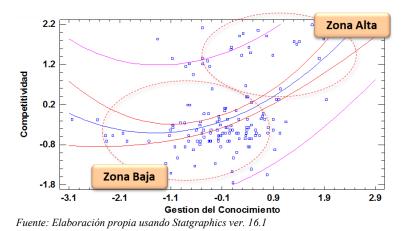
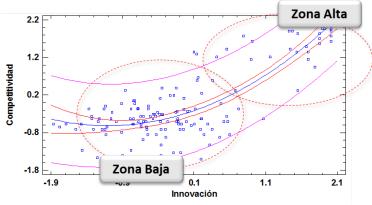


Gráfico 4: Percepción de Competitividad vs Acciones de Gestión del Conocimiento

En la gráfica anterior se muestran dos zonas de comportamiento de la variable competitividad, en la zona baja se aprecia que aunque se realicen un número significativo de acciones relacionadas con la gestión del conocimiento, ello no impacta significativamente en el incremento de competitividad. Pero al acumular consistentemente un mayor número de acciones se logra el incremento de competitividad (zona alta) deseable por el gerente de empresa.Mientras que al realizar el mismo procedimiento para la variable innovación se observa un comportamiento similar, lo cual confirma la idea de que las acciones sobre esta variable se reflejan a mediano y largo plazo. La mejor curva que representa el comportamiento de las variables se dio entre Competitividad e Innovación con un R<sup>2</sup> de 0.69. En este sentido es destacable que a las demás variables los esfuerzos sobre responsabilidad social, la eficiencia productiva y los mecanismos de control financiero también se les aplicaron la misma metodología pero a pesar de mostrar un comportamiento similar, sus resultados de ajuste del modelo fueron inferiores a los encontrados para la variable innovación. Con ello se obtiene evidencia empírica de la importancia de la innovación hacia el mejoramiento competitivo.

Gráfico 5: Innovación vs Competitividad



Fuente: Elaboración propia usando Statgraphics ver. 16.1

Al analizar las hipótesis de la investigación se encontró la siguiente evidencia empírica para cada una de las hipótesis planteadas:

	<u>Hipótesis</u>	<u>Resultado</u>
H1:	Incrementar los esfuerzos de Innovación tiene un impacto positivo en la Competitividad.	NO RECHAZAR Existe una zona en donde la acumulación de acciones de innovación favorece a la competitividad
H <sub>2</sub> :	Incrementar los esfuerzos de Gestión del Conocimiento tiene un impacto positivo en la Competitividad.	RECHAZAR Si bien existe una zona en donde la acumulación de acciones de gestión del conocimiento incrementa la posición competitiva, noes estadísticamente satisfactoria .

#### CONCLUSIONES

Las empresas necesitan identificar los elementos que favorecen la mejora competitiva donde Aguilera et al (2011b) señalan que no es un proceso simple, sino más bien un proceso acumulativo de experiencia y análisis de su posicionamiento estratégico. Así el mejoramiento competitivo sigue la premisa señalada por Toh & Tan (1998) de que el reconocimiento de las capacidades de la propia empresa es la base para la formulación de estrategias tendientes a incrementar los esfuerzos por identificar oportunidades de innovación, situación similar para la variable de gestión del conocimiento. Por lo que los gerentes de empresa necesitan afinar como señala Andrews (1998) sus habilidades para detectar cambio en el entorno competitivo y contrastarlos contra sus verdaderas capacidades (Prahalad & Hamel, 1990) y (Álvarez, 2003). Si bien es necesario tomar en cuenta las recomendaciones vertidas en este documento, Mukherji & Mukherji (2010) afirman que deben existir un mínimo de capacidades presentes en la empresa para facilitar la implementación de mejoras en cualquier departamento. Okunnu, Ovedijo, y Olateju (2010) y Perdomo (2003) señalan la necesidad de ubicar en primera instancia la realidad empresarial dentro del contexto de las acciones realizadas por las empresas competidoras, puesto que el tamaño y estructura empresarial determina las posibilidades de acción. Por lo que si bien la innovación es un camino accesible, Kaplinsky v Santos (2005) así como Claver, Quer, & Molina (2005) relacionan las metas de la empresa con sus capacidades humanas para realizar innovaciones. De no existir un nivel adecuado de habilidades en el personal como indica Suk Park (2003), se volverá virtualmente imposible imponer una nueva estrategia tendiente a mejorar e innovar en la propia gestión empresarial.

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# LA ARMONIZACIÓN CONTABLE HACIA LA TRANSPARENCIA Y RENDICIÓN DE CUENTAS EN MÉXICO

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## RESUMEN

El presente artículo deriva de una investigación descriptiva de tipo documental, en la que se estudió la armonización contable que tiene en proceso de implementación el gobierno de México, la cual tiene como objetivo que las entidades públicas generen información financiera, presupuestal y programática confiable que transparente las acciones del gobierno permitiendo la rendición de cuentas en tiempo real, así como que en base a esta información se evalúe la asignación de presupuestos basados en resultados. Al momento, el gobierno mexicano tiene un avance en promedio del 70%, quedando pendiente además de terminar el proceso de implementación, el desarrollar los mecanismos necesarios para dar seguimiento al cumplimiento de los objetivos planteados.

PALABRAS CLAVE: Armonización contable, entidades públicas, rendición de cuentas, información financiera.

## ACCOUNTING HARMONIZATION TO TRANSPARENCY AND ACCOUNTABILITY IN MEXICO

### ABSTRACT

This article derives from a descriptive of documentary, which was studied accounting harmonization which is being implemented by the Government of México, which aims to generate public entities financial, budgetary and programmatic transparent reliable government actions accountability allowing real-time, and that based on this information to evaluate the allocation of results-based budgeting. At the moment, México have an advance of 70% on average, also pending completion of the implementation process, developing mechanisms to monitor compliance of the objectives.

JEL: A10, A11, G28, G38, H00, H59, M41, M48.

**KEYWORDS:** Accounting harmonization, public entities, accountability, financial information.

## INTRODUCCIÓN

La información financiera es utilizada en general para la toma de decisiones de cualquier organismo sea público o privado. Ésta es obtenida de los sistemas contables implementados y es regulada por organismos especializados para que pueda ser utilizada y usada con confiabilidad y oportunidad. Las Normas de información financiera (NIF), son emitidas por el Consejo Mexicano de Normas de Información financiera (CINIF), representan lineamientos y normas que regulan la elaboración y presentación de la información financiera. Las NIF pretenden la armonización de las normas utilizadas por los diferentes sectores de la economía, siendo el objetivo de la armonización de la normatividad contable generar información financiera comparable, transparente y de alta calidad, sobre el desempeño

de las entidades económicas. Desde su creación el CINIF estableció dentro de sus objetivos hacer convergente la normatividad contable del sector gubernamental en México, en el 2009 en Londres en la cumbre de la profesión contable, se asume el compromiso de establecer normas contables para el sector público. De acuerdo a las NIF los objetivos de la información financiera, dependen de las necesidades del usuario, y éstas a su vez de la naturaleza de las actividades que realiza la organización.

La información financiera generalmente son los estados financieros en los cuales reflejan la situación financiera (sus recursos y la fuente de dichos recursos), los resultados que se obtuvieron por la actividad realizada y cualquier declaración que sea necesaria para interpretar de forma adecuada el desempeño que obtuvo la entidad de que se trate.El sector público no está exento de requerir información financiera ya que ésta "es necesaria para mantener la disciplina fiscal, tomar decisiones sobre la asignación de recursos, optimizar la eficiencia operativa e incrementar la transparencia sobre el uso del erario público." (Vargas, 2010)En los últimos años, se ha hecho evidente la necesidad de que la información financiera sea un medio para el rendimiento de cuentas a través de la transparencia de la misma, especialmente en el sector gubernamental, razón por la cual los gobiernos de todos los países han dispuesto diversas reglamentaciones para dar cumplimiento a los reclamos de la sociedad.

México, en atención a estos requerimientos y a los organismos internacionales, ha establecido la estrategia de la "Armonización Contable", con la cual pretende homogeneizar la información financiera y presupuestal que es generada en los tres niveles de gobierno: federal, estatal y municipal. El presente análisis tiene como fin evaluar si la estrategia de la Armonización contable es viable y que avances se han tenido hasta el momento en su implementación y en todo caso, cuales han sido los obstáculos que se les han presentado y como los han ido solucionando.

## **REVISIÓN LITERARIA**

### De los conceptos

Para entender de que trata la Armonización contable, se hace necesario se clarifiquen algunos conceptos tales como transparencia y rendición de cuentas, sector público y fiscalización, tomando en consideración lo señalado por la Secretaría de Hacienda y Crédito Público (SHCP) y la Ley de contabilidad. Armonización Contable: "Se trata del proceso de homogeneización y modernización de los sistemas de información contable para los tres ámbitos de gobierno, donde se contemplan marcos jurídicos similares, principios y normas contables comunes, sistemas de administración financiera, registro contable (incluvendo la descripción completa y estandarizada del patrimonio) y modelos de información de cuentas compartibles (comparables) para controlar, evaluar y fiscalizar las cuentas públicas de manera eficaz y eficiente". (SHCP, 2012).De acuerdo con la Ley de contabilidad, "Armonización es la revisión, restructuración y compatibilización de los modelos contables vigentes a nivel nacional, a partir de la adecuación y fortalecimiento de las disposiciones jurídicas que las rigen, de los procedimientos para el registro de las operaciones, de la información que deben generar los sistemas de contabilidad gubernamental, y de las características y contenido de los principales informes de rendición de cuentas". Fiscalización: "Acción de vigilar a detalle el buen uso del patrimonio público. La revisión de la aplicación de recursos y programas públicos comprueba que los montos lleguen al destino programado y que las acciones de gobierno se cumplan conforme a lo legalmente establecido". (SHCP, 2012)

Rendición de Cuentas: "Consiste en informar y explicar a los ciudadanos las acciones realizadas por el gobierno de manera transparente y clara para dar a conocer sus estructuras y funcionamiento, y por consecuencia, ser sujeto de la opinión pública. Es una tarea obligada y permanente, con actores claramente identificados que llevan a cabo la vigilancia, el control y la sanción sobre los contenidos sustantivos del ejercicio gubernamental, en todas sus facetas, en un entorno legal y democrático explícito y abierto, que identifica con claridad las obligaciones que cada servidor público debe cumplir". (SHCP,

2012) Sector Público Federal: "Es el conjunto de órganos administrativos mediante los cuales el Estado cumple o hace cumplir la política y voluntad expresada en las leyes fundamentales del país. Incluye todos los órganos administrativos de los poderes legislativo, ejecutivo y judicial federales y organismos públicos autónomos. Comprende por lo mismo al Sector Central y al Sector Paraestatal de control presupuestario directo e indirecto, excluye la administración de los gobiernos locales". (SHCP, 2012) El sector público en México está constituido por el Poder Legislativo, Poder Ejecutivo, Poder judicial y organismos públicos autónomos, instituciones, empresas y personas que realizan alguna actividad económica en nombre del Estado y que se encuentran representadas por el mismo, es decir, que abarca todas aquellas actividades que el Estado posee o controla (Artículos 40 y 73 constitucional).

Transparencia: es el acto que consiste en abrir la información gubernamental al público, al escrutinio de la sociedad. La transparencia no implica un acto de rendir cuentas a una persona en específico, sino la práctica de colocar la información gubernamental en la vitrina pública, para que la gente pueda revisarla, analizarla y en su caso, usarla como mecanismo de sanción. (Ugalde, 2002)

Transparencia: Según la Organización para la Cooperación y el Desarrollo Económicos (OCDE), se refiere a un entorno en el que los objetivos nacionales, el marco institucional, legal y económico, las decisiones de política y su justificación, los datos e información relacionada con las políticas monetarias y financieras, y la forma en que las agencias rinden cuentas, se proporcionan al público de una manera comprensible, accesible y oportuna. (SHCP, 2012)

#### De La Armonización Contable

La información financiera del sector público; de acuerdo con estudios realizados por diversos autores a petición del Banco Mundial; es necesaria para "mantener la disciplina fiscal, tomar decisiones sobre la asignación de recursos, optimizar la eficiencia operativa e incrementar la transparencia sobre el uso del erario público" (Vargas 2010). La información financiera es considerada como una herramienta útil que al ser utilizada y analizada de manera adecuada debe permitir eficientar la calidad y aplicación del gasto público, siendo entonces necesario que sea comprensible, comparable, oportuna, completa y confiable. Para efectos de la Ley de contabilidad, la información financiera esta integrada por "la información presupuestaria y contable expresada en unidades monetarias, sobre las transacciones que realiza un ente público y los eventos económicos identificables y cuantificables que lo afectan, la cual puede representarse por reportes, informes, estados y notas que expresan su situación financiera, los resultados e su operación y los cambios en su patrimonio".

En términos generales, la información financiera pública se puede clasificar en información de índole presupuestaria y de índole contable. La diferencia fundamental entre ambas se encuentra en que la información financiera presupuestaria se rige por la parte legal del presupuesto público, mientras que la contabilidad financiera da forma a la situación económica al registrar y presentar los resultados de los hechos realizados. La reforma de armonización contable en México, debe ser comprendida como la forma en la que el gobierno pretende; por una parte, modernizar y uniformar las políticas y criterios de registro y presentación financiera cumpla con los atributos ya mencionados para que cumpla también con la generación de una adecuada toma de decisiones y cumplir con los requisitos de transparencia y rendición de lo que se conoce como la base del presupuesto por resultados y la evaluación de las actividades realizadas como información del desempeño. La Armonización contable pretende generar grandes beneficios; sin embargo, el proceso de implementación no ha terminado y se tiene que considerar una adecuada retroalimentación que permita hacer los ajustes oportunos que den los resultados esperados.

#### Proceso De Implementación De La Armonización Contable

A efecto de cumplir con la obligación de dar cuenta y razón de los actos de gobierno, se publico en el 2002 en el Diario Oficial de la Federación, la Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental, esta Ley tiene como finalidad proveer lo necesario para garantizar el acceso de toda persona a la información en posesión de los Poderes de la Unión, los órganos constitucionales autónomos o con autonomía legal, y cualquier otra entidad federal.

En mayo 2008 se publicó en el Diario Oficial de la Federación, la aprobación por parte del Congreso de la Unión de la modificación a la fracción XXVIII del Artículo 73 Constitucional, otorgando facultades al Poder Legislativo para expedir leyes que regulen la práctica contable en los tres órdenes de gobierno, estableciendo con ello, las bases jurídicas para la armonización contable y de sus cuentas públicas. Con base en lo anterior, el 1 de enero del 2009 entró en vigor la Ley General de Contabilidad Gubernamental (Ley de contabilidad), la cual, contempla como principal objetivo "establecer los criterios generales que regirán la contabilidad gubernamental y la emisión de información financiera de los entes públicos para lograr su adecuada armonización".

A efectos de que el proceso de armonización se diera de la mejor forma posible, en la propia Ley de contabilidad establece en su artículo segundo transitorio la instalación de un Consejo Nacional de Armonización Contable (CONAC), que será el órgano de coordinación para la armonización de la contabilidad gubernamental en todos los niveles de gobierno.De acuerdo con lo publicado en la Ley de contabilidad, ésta y el Consejo se "erigen en el pilar fundamental de la armonización contable y la emisión de información financiera, con la finalidad de contar con información homogénea de las finanzas públicas, que sea factible de ser comparada y analizada bajo criterios comunes, facilitando el escrutinio público y las tareas de fiscalización". La Ley de Contabilidad en términos generales señala que:

- Facilitará a los entes públicos el registro y la fiscalización de los activos, pasivos, ingresos y gastos y, en general, permitirá medir la eficacia, economía y eficiencia del gasto e ingreso públicos y al establecer en la misma la obligación de publicar su información financiera.
- Es de observancia obligatoria para los poderes Ejecutivo, Legislativo y Judicial de la Federación, entidades federativas; los ayuntamientos de los municipios; los órganos político-administrativos de las demarcaciones territoriales del Distrito Federal; las entidades de la administración pública paraestatal, ya sean federales, estatales o municipales y los órganos autónomos federales y estatales.
- Los gobiernos estatales se coordinarán con los municipales para que éstos armonicen su contabilidad con base a lo dispuesto en esta Ley.
- Los entes públicos aplicarán la contabilidad gubernamental para facilitar el registro y la fiscalización de los activos, pasivos, ingresos y gastos y, en general, contribuir a medir la eficacia, economía y eficiencia del gasto e ingresos públicos, la administración de la deuda pública, incluyendo las obligaciones contingentes y el patrimonio del Estado.
- La contabilidad gubernamental determinará la valuación del patrimonio del Estado y su expresión en los estados financieros.

Para darle forma a lo establecido en la Ley de contabilidad, se publicó también el Marco Conceptual de Contabilidad Gubernamental (MCCG), siendo éste "la base del Sistema de Contabilidad Gubernamental (SCG) para los entes públicos, constituyéndose en el referente teórico que define, delimita, interrelaciona

e integra de forma lógico-deductiva sus objetivos y fundamentos. Además, establece los criterios necesarios para el desarrollo de normas, valuación, contabilización, obtención y presentación de información contable y presupuestaria, en forma clara, oportuna, confiable y comparable, para satisfacer las necesidades de los usuarios".

Parte importante del MCCG son los "Postulados básicos de contabilidad gubernamental", considerándose éstos como los elementos fundamentales que configuran el SCG y tiene la finalidad de uniformar los criterios, métodos y procedimientos de la práctica contable. En los artículos transitorios de la Ley de contabilidad se señalan como principales momentos de cumplimiento los siguientes: Inicio de la vigencia fue el primero de enero de 2009 para todas las entidades de gobierno. La implementación fue y será de manera paulatina de la siguiente forma: La Federación y las entidades federativas, comprendiendo las dependencias constituidas en los poderes Ejecutivo, Legislativo y Judicial de cada nivel de gobierno, tienen los siguientes momentos regulados:

- Al 31 de diciembre de 2010, deberán cumplir con la emisión del plan de cuentas, postulados básicos, reglas de registro y valoración del patrimonio, catálogos de cuentas y manuales de contabilidad.
- Al 31 de diciembre de 2011, deberán tener realizados los registros contables con base acumulativa y en apego a postulados básicos de contabilidad gubernamental armonizados. Los libros de diario, mayor e inventarios y balances, los catálogos de cuentas y manuales de contabilidad y emitir información contable, presupuestaria y programática.
- Al 31 de diciembre de 2012, deberán contar con los registros contables del patrimonio y su valuación, generar indicadores de resultados sobre cumplimiento de metas y publicar información contable, presupuestaria y programática.

Los ayuntamientos de los municipios emitirán información periódica y elaborarán sus cuentas públicas a más tardar el 31 de diciembre de 2012. En lo relativo a la Federación, las entidades y los órganos autónomos, la armonización contable, debería estar funcionando en tiempo real a partir del 31 de diciembre de 2011. Las entidades paraestatales del gobierno federal, las entidades y los órganos autónomos de las entidades federativas, los ayuntamientos de los municipios y los órganos político-administrativos del Distrito Federal deberán estar funcionando en tiempo real al 31 de diciembre de 2012. Aspecto importante a considerar en la Armonización contable, es lo relativo a los inventarios de bienes muebles de la federación y entidades federativas, debiendo estar integrados al 31 de diciembre de 2011. En octubre de 2012, se publicó la última reforma a la Ley de contabilidad, la cual comprende:

- Reglas para armonizar la información financiera del ciclo hacendario, relativa a la programación, presupuesto, ejercicio, seguimiento, evaluación y rendición de cuentas de los recursos públicos.
- La SHCP y las Secretarías de finanzas o sus equivalentes de los gobiernos locales, facilitarán el acceso a la información financieros en sus páginas de Internet.
- Los municipios menores a 25 mil habitantes, serán auxiliados en la integración de su información financiera así como en la difusión de la misma.
- Señala rubros específicos de información que deben incluir los entes públicos en sus leyes de ingresos y presupuestos de egresos, entre otros.

## METODOLOGÍA

El presente trabajo corresponde a una investigación descriptiva de tipo documental ya que lo que se pretendió identificar son los principales pasos que se siguieron en la implementación de la Armonización contable en el caso de México, así como aquellos pasos que aún están en proceso. También, se pretendió identificar de qué manera se cumple con la Ley de transparencia y rendimiento de cuentas. Los pasos que se siguieron son:

Primero.- Se dio lectura a documentación básica, así como leyes y reglamentos establecidos para la implementación de la Armonización contable en México.

Segundo.- Se analizó la información recabada identificando los períodos que correspondieron a la implementación de la Armonización contable en México y la forma en que se le dio seguimiento a cada uno de éstos pasos y procedimientos.

Tercero.- Se dio lectura y se analizaron los informes emitidos por la CONAC, en los cuales se da a conocer la situación que guarda la Armonización contable en México.

Cuarto.- Se investigo en dependencias de gobierno la forma en que se ha dado el proceso de implementación de la Armonización contable en México.

Quinto.- Se emitieron resultados y conclusiones.

## RESULTADOS

Del análisis realizado se obtuvieron los siguientes resultados: La armonización contable en México surge como una estrategia para dar cumplimiento a la transparencia y rendimiento de cuentas que tienen los gobiernos con sus gobernados a través de la obligación de publicar los informes financieros y presupuestales que surjan de la contabilidad en tiempo real. Pretende homogeneizar los procedimientos contables y la información financiera que emana de ésta en todos los niveles de gobierno: federal, estatal y municipal; para permitir la toma de decisiones asertiva considerando la confianza, oportunidad y comparabilidad que se puede gestar de esta homogeneización.

De acuerdo con información publicada por la CONAC, al 31 de diciembre de 2011 se cumplió con lo establecido para la Federación y entidades federativas, relativo a la implementación de los procedimientos contables de registro y publicación de información. Lo anterior esta avalado por las publicaciones en las páginas de Internet de los gobiernos de diversas entidades federativas. Queda pendiente lo relativo a los municipios con menos de 25 mil habitantes, ya que no cuentan con recursos suficientes para establecer un Sistema de contabilidad como el requerido, razón por la cual se dio la modificación a la Ley de contabilidad y se les estuvo otorgando recursos financieros por parte de la Federación. También queda pendiente el diseño e implementación de un Sistema de contabilidad uniforme, el cual será proporcionado sin costo. Se diseño un modelo de evaluación que deberá concluir a más tardar el 30 de noviembre del año en curso.El Secretario Técnico del CONAC pondrá a disposición de los entes públicos un aplicativo para recoger e integrar la base de datos del diagnóstico, la evaluación, así como para integrar el inventario de recomendaciones y compromisos, incluido sus plazos de ejecución y los criterios de seguimiento.

El Secretario Técnico del CONAC presentará un informe con los resultados en la Primera Sesión del CONAC del año 2013. En cuánto a la capacitación de los procesos que conlleva la armonización contable, al 2012 se generaron apoyos para que todos los participantes en la misma estén debidamente capacitados. De entrevista a dependencias de gobierno, la información ha fluido y se han establecido los mecanismos normados y pertinentes, sin embargo no se dio un proceso de sensibilización a través de una adecuada capacitación que les permitiera participar de forma más asertiva en todo este proceso.

## CONCLUSIONES

En términos generales, se concluye que la armonización contable:

Primero.- Permitirá que se de la homogeneización en la información financiera en la Federación y las entidades federativas en los tiempos establecidos.

Segundo.- Para el caso de los municipios con menos de 25 mil habitantes, deberán ser analizadas con mayor profundidad sus problemáticas para determinar si es necesario el diferimiento del cumplimiento de las fechas establecidas.

Tercero.- Se tiene un avance en promedio del 70% en las entidades federativas y dependencias a nivel federal, han quedado rezagados en este proceso los municipios.

Tercero.- En el caso del seguimiento, es necesario poner especial énfasis en el método de diagnóstico para tener información que permita tomar decisiones asertivas.

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# ESTRATEGIA DE LOS SECTORES EDUCATIVO, EMPRESARIAL Y GUBERNAMENTAL, PARA LA GENERACION Y CONSOLIDACION DE PEQUEÑAS Y MEDIANAS EMPRESAS EN EL MUNICIPIO DE AGUA PRIETA, SONORA MEXICO

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## RESUMEN

Las pequeñas y medianas empresas (PvMES) en el país son una fuente de empleos así como de generación de riqueza, uno de los problemas importantes en el control de la información con respecto al desarrollo y consolidación de estas PyMES es en general la falta de agrupación de las misma por el giro económico en que cada una se desarrolla y ademas de no contar con información general para este control, por lo que la presente investigación propone el desarrollo de una metodología que generará un inventario de negocios de PyMES en la ciudad de Agua Prieta, en el estado de Sonora, México donde se sectorizará la toma de una serie de encuestas donde se recabará la informacián necesaria para iniciar este inventario, esta información se recabará de la aplicación de encuestas y entrevistas a los propietarios o encargados de los negocios, buscando demostrar que la información generada podría ser considerada para la definición de estrategias en beneficio de las PyMES preferentemente en relación a su creación y/o consolidación. El aporte importante de esta investigacion es que los organismos educativos como el Instituto Tecnológico de Agua Prieta, los organismos gubernamentales como Desarrollo Económico de Agua Prieta, asociaciones civiles como APSON Visión 20-30 y las camaras de comercio como CANACINTRA Agua Prieta, busquen permanentemente el desarrollo y progreso de las PyMES de este municipio. Se busca proporcionar estrategias para la toma de decisiones para el municipio de Agua Prieta y en las dependencias mencionadas, en relación a generación y/o consolidación de PyMES, siendo su principal aportación la generación de empleo, a través de las empresas de tipo microempresarial.

PALABRAS CLAVES: SMEs, business inventory, shared strategy, education sector, government, industry.

# STRATEGY THE EDUCATION, BUSINESS AND GOVERNMENT, FOR THE GENERATION AND CONSOLIDATION OF SMALL AND MEDIUM ENTERPRISES IN THE MUNICIPALITY OF AGUA PRIETA, SONORA MEXICO

## ABSTRACT

Small and medium enterprises (SMEs) in the country are a source of employment and wealth generation, one of the major problems in the control of information regarding the development and consolidation of these SMEs is generally a lack of clustering the same for the economic turnaround that each develops and besides having no overview for this control, so this research proposes the development of Businesses, seeking to demonstrate that the information generated could be considered for the definition of strategies for the benefit of SMEs preferably in relation to the creation and / or consolidation. The major contribution of this research is that educational agencies and the Technological Institute of Agua Prieta, government agencies such as Economic Development Agua Prieta, civil associations as Apson Vision 20-30 and the chambers of commerce as CANACINTRA Agua Prieta, looking permanently development and progress of SMEs in this country it seeks to provide strategies for making decisions for the town of Agua Prieta and the offices mentioned in relation to generation and/or consolidation of SMEs, whose main contribution to employment generation through micro-enterprise type companies.

#### **JEL:** M2-Business Economics

**KEYWORDS:** PyMES, business inventory, shared strategy, government, industry.

## INTRODUCCION

Es evidente que en México en las últimas décadas, el entorno macroeconómico de crisis recurrentes, ha significado que se le asigne la máxima prioridad al restablecimiento de las condiciones de estabilidad financiera, en detrimento, pese a su importancia, de las cuestiones relacionadas con la política regional. El desarrollo no se da en lo abstracto, sino que se manifiesta visiblemente en las regiones, donde del análisis de las mismas y de la identificación y comprensión de los impactos, obtenemos un mejor entendimiento de las condiciones necesarias y de las limitantes presentes para alcanzar el nivel de desarrollo deseado, dadas estas condiciones se puede definir que "Una unidad económica de producción y decisión que, mediante la organización y coordinación de una serie de factores (capital y trabajo), persigue obtener un beneficio produciendo y comercializando productos o prestando servicios en el mercado" (Andersen, 1999). Por lo que de manera muy general todas las pequeñas y medianas empresas (PyMES) comparten casi siempre las mismas características, por lo tanto, se podría decir, que estas son las características generales con las que cuentan las PyMES (Méndez, 1996).

Es importante que los recursos necesarios para que estas empresas de pequeño y mediano tamaño operen sea proporcionado por una o dos personas que establecen una sociedad. Para México, nuestro Estado y la localidad, no hay duda alguna que las PyMES son un eslabón fundamental, indispensable para el desarrollo. Contamos con una importante base de Micro, Pequeñas y Medianas empresas, claramente más sólida que muchos otros países del mundo, debemos aprovecharla para hacer de eso una fortaleza que haga competitivo al país, que seconvierta en una ventaja real para atraer nuevas inversiones y fortalecer la presencia de productos mexicanos tanto dentro como fuera de nuestra nación y podemos pretender que en Agua Prieta se apove en mayor medida al crecimiento v/o consolidación de PvMES de diversos giros, para fortalecer la economía local y regional. Es una tarea de Instituciones de Educación Superior, empresarios, las Cámaras, así como de la sociedad en su conjunto, exigir que el gobierno establezca y ejecute políticas públicas que sienten condiciones adecuadas para alentar la competitividad de las empresas, especialmente de las PyMES. La confianza en las autoridades responsables es fundamental para que las políticas públicas den lugar a mayores inversiones privadas. Es indispensable apoyarlas para seguir creciendo pero sobre todo para fortalecerse, tecnificarse e integrarse de mejor manera en el aparato productivo nacional Nuestra aportación es la realización de un inventario de negocios en conjunto con otras entidades de la localidad, que sirva como información confiable para determinar estrategias municipales en pro de la creación y consolidación de las PyMES.

Como se muestra en la tabla 1, tenemos la clasificación que se tomara como base en el diseño de los mecanismos de recoleccion de información para generar el inventario de negocios, la parte de tamaño como micro, pequeña y mediana empresa, dependiendo de el número de trabajadores y monto de ventas, permitirá una mejor clasificación de las empresas por giro económico.

Tabla 1: Nueva Clasificación de Micro, Pequeñas y Medianas Empresas a partir del 30 de junio de 2009 por Secretaria de Economía.

Tamaño	Sector	Número de trabajadores	Monto de ventas anuales (mdp)	Tope máximo combinado*
Micro	Todas	Hasta 10	Hasta \$4	4.6
Pequeña	Comercio Industria y Servicios	Desde 11 hasta 30 Desde 11 hasta 50	Desde \$4.01 hasta \$100 Desde \$4.01 hasta \$100	93 95
Mediana	Comercio Servicios	Desde 31 hasta 100 Desde 51 hasta 100	Desde \$100.01 hasta \$250	235
	Industria	Desde 51 hasta 250	Desde \$100.01 hasta \$250	250

Clasificación utilizada para determinar el tamaño de las empresas de acuerdo a su número de empleados y sus ventas.

## **REVISION LITERARIA**

La tendencia de la economía global trae como consecuencia grandes oportunidades de negocios no solo para las grandes corporaciones sino también para las pequeñas empresas que actualmente han cambiando la imagen tradicional que se tenia de ellas de negocios domésticos al considerar como sus mas grandes desafíos el crecimiento de grandes comercios, el avance de las tecnologías de la información y telecomunicaciones y la misma globalización (Longenecker,2001).

Para identificar la importancia de la PyMES en México, analizaremos en principio su significado, el autor define PyMES como: "Una Unidad Económica de Producción y Decisiones que, mediante la Organización y coordinación de una serie de Factores (Capital y Trabajo), persigue obtener un beneficio produciendo y comercializando productos o prestando servicios en el mercado" (Arthur Anderson, 1999). En la actualidad el 99.8% de las empresas mexicanas son Micro, pequeñas y medianas, de este monto el 90% son microempresas, la totalidad de MIPYMES dan empleo al 70% de la población económicamente activa va que "el nuevo orden económico resulta de la acción de miles de empresas -la mayoría pequeñasque tratan nuevas ideas, nuevos productos, nuevos servicios, nuevos procesos en un mercado cambiante" (Varela R, 2008). Agua Prieta cuenta con una población aproximada de 80,000 habitantes de los cuales cerca de 35,000 personas conforman la población económicamente activa. Por lo que una tarea de las Instituciones de Educación Superior, empresarios, las cámaras de comercio, así como de la sociedad en su conjunto, es exigir que el gobierno establezca y ejecute políticas públicas que sienten condiciones adecuadas para alentar la competitividad de las empresas, especialmente de las PyMES. La confianza en las autoridades responsables es fundamental para que las políticas públicas den lugar a mayores inversiones privadas. Es indispensable apoyarlas para seguir creciendo pero sobre todo para fortalecerse, tecnificarse e integrarse de mejor manera en el aparato productivo nacional.

La realización de un inventario de negocios lidereado por el Instituto Tecnológico de Agua Prieta en conjunto con otras entidades de la localidad, busca generar información confiable para determinar estrategias municipales en pro de la creación y consolidación de las PyMES. La ubicación de Agua Prieta al noroeste del estado de Sonora, su ubicación fronteriza, con una gran riqueza cultural y posición cerca de un comercio emergente como lo es el de Estados Unidos de America, representa un espacio de privilegio para el trabajo y la exportación de productos, abriendo una posibilidad para lacreación de PyMES con giros económicos tanto de servicios como de productos. Destacandose el estado de Sonora cómo semillero de líderes, de hombres y mujeres emprendedoras, independientes, forjados en una autonomía.

## DEMOGRAFÍA

El comportamiento de la población según los censos de 1980, 1990 y las cifras del censo de población y vivienda 2000 elaborados por el INEGI, presenta lo siguiente:

Tabla 2: Población y tasa de crecimiento de Agua Prieta, Sonora

Población			Tasa de Crecimie	nto %)
1980	1990	2000	1990-1980	1990-2000
34,380	39,120	61,944	1.3	4.74

Fuente: INEGI Censo General de Población y Vivienda 1980-1990 y 2000

#### Aspectos Demográficos

La población económicamente activa (P.E.A.) del Municipio es de 23,353 habitantes, de los cuales 23,144 tienen ocupación y 209 se encuentran desocupados. De las personas ocupadas 955 se dedican al sector primario, 10,182 al sector secundario, 11,266 al terciario, 741 no especifican actividad y 19,788 habitantes son económicamente inactivos. En este municipio son relevantes la Agricultura, la Ganadería, la Apicultura, la Explotación Forestal en baja escala y la Industria, básicamente Maquiladora. En 1997 la infraestructura turística, constaba de 10 hoteles y moteles con 316 habitaciones. Actualmente existen 14 establecimientos que ofrecen 455 habitaciones. La localización geográfica de Agua Prieta es un punto clave para el desarrollo de la industria maquiladora, lo cual le permite tener acceso rápido a los estados del sureste y de la costa del pacifico de la Unión Americana. Se encuentra a 322 Km. de la ciudad de Phoenix, capital de Arizona y a 377 Km. De Hermosillo, capital del estado de Sonora. Al este de Agua Prieta se encuentra Ciudad Juárez, Chihuahua que a su vez es frontera con la ciudad del Paso, Texas centros urbanos que en los últimos años han tenido un crecimiento económico de primer orden. Para el logro del objetivo planteado para el desarrollo regional, las estrategias regionales que marcarán la acción del gobierno estatal son:

- Impulso a la incubación de empresas
- Reconversión y diversificación productiva.
- Incremento en la competitividad.
- Reactivación de las actividades y economías regionales.
- Especialización selectiva en áreas con ventajas competitivas.
- Desarrollo de encadenamientos productivos, especialmente en las actividades primarias.
- Impulso, transferencia y difusión de la investigación y de la tecnología.
- Programas de inversión y financiamiento a las actividades productivas.
- Impulso a las actividades turísticas.
- Vinculación y capacitación educativa para actividad económica.

Las Instituciones de educación superior como lo es el Instituto Tecnología de Agua Prieta, saben del compromiso que se tiene en contribuir con su parte al logro de metas y objetivos en beneficio de la comunidad, regios y país.

Agua Prieta es un lugar atractivo para la inversión, cuenta con:

- Suficiente terreno plano
- 2 parques industriales funcionando
- Gas natural
- Mano de obra calificada
- Somos el municipio más cercano a las principales carreteras de México y EU
- Facilidades en los trámites de exportación y el puerto de entrada a la ciudad de Douglas, Arizona.
- El cruce fronterizo es uno de los más ágiles, tan solo de 15 a 20 minutos en ambos países.
- Estadísticas de INEGI, comprueban que el 96.3 % de la población cuenta con educación básica, lo que asegura mano de obra calificada.
- El 94 % del municipio cuenta con infraestructura en Agua y Drenaje.

- Nuestro Índice mensual de rotación de personal es el mas bajo, entre 3.0% a 3.5% comparado con
- Municipios aledaños con un estimado del 5.1% mensual.
- El municipio de Agua Prieta produce 258 Megawatts, casi 10% mas de lo que se produce en Hermosillo, y tiene en proyecto una planta generadora de luz, que produciría cerca de 500 Megawatts más.

Tabla 3: Características de Agua Prieta

Población	110,000 habitantes
Agencias Aduanales	8 oficinas
Compañías de transporte de carga	6 compañías
Compañías de auto transporte	6 compañías
Puerto de altura	600 Km.
Altitud	1,402 metros sobre el nivel del mar
Derechohabientes del IMSS	18,000 personas
Economía manufacturera	208 unidades, 9,225 empleados
Economía comercio	790 unidades, 1990 empleados
Inversión en vivienda (Infonavit)	10, 660 m.n.
Alumnos inscritos	13,578
Maquiladoras	30 industrias

Fuente: www.ceesonora.org.mx Como se muestran en la tabla 3 Agua Prieta cuenta con todas las características relevantes para ser un gran centro de comercio así como de generación de PyMES, ya que el terreno es suficiente y los servicios de comunicación y trasporte son relevantes.

Entre los principales aspectos que inciden en la economía de Agua Prieta, están su cercanía con los Estados Unidos de Norteamérica y con ello, su importancia en el contexto internacional. La globalización de la economía ha ocasionado un importante tránsito de mercancías y personas con la economía más poderosa del mundo. Esta debe ser una de las principales motivaciones para hacer de Agua Prieta, una ciudad fronteriza moderna, conectada y comunicada. Se cuenta con tres carreteras que dan acceso a la ciudad con el resto del estado, se cuenta también con transporte ferroviario de carga y una pista local para la aviación menor, principalmente. La principal actividad industrial son las maquiladoras, cuyos giros principales son: prendas de vestir, muebles de madera, electrónica, material y equipo para hospitales, deportivos, componentes para computadoras, para radio comunicación y de televisión, entre otros.

## METODOLOGÍA

La articulación y/o unión de esfuerzos de los actores socioeconómicos locales para abatir los rezagos de los ámbitos territoriales mejoraría las condiciones de la localidad (Rodríguez 1996). Pudiendo incentivar el desarrollo de las localidades, potenciar sus competencias para atraer recursos financieros a su localidad y con ello generaría las condiciones para crear esos tan ansiados emprendimientos económicos, generadores de empleo en la localidad y frenar la migración de la población económicamente activa de su lugar de origen. Las limitaciones u obstáculos se presentan con más frecuencia en algunos de los casos, es poco el apoyo de las empresas o negocios a encuestar así como algunas instituciones gubernamentales o no gubernamentales a las que compete el tema.

La metodología utilizada para el desarrollo de la investigación es darle seguimiento y actualización de datos derivados del inventario de negocios, con entrevistas a los propietarios o encargados de los negocios, para recabar información relevante o actualización de la misma, que sirviera para la definición de estrategias en su propio beneficio, preferentemente en relación a su creación y/o consolidación, las encuestas que se aplicaron fueron diseñadas en base a las necesidades de información de los organismos involucrados en este proyecto, que son: Instituto Tecnológico de Agua Prieta, Desarrollo Económico de Agua Prieta, APSON Visión 20-30 y CANACINTRA Agua Prieta, quienes están en búsqueda permanente del desarrollo y progreso de este municipio. Su aplicación se hizo a través de un despliegue de encuestadores capacitados para tal fin, dicho mecanismo fue llevado a cabo en el transcurso de ocho semanas. Para el análisis e interpretación de la información, se desarrolló una

plataforma informática que nos permitió generar de manera ordenada y confiable los resultados obtenidos del inventario de negocios, que será de utilidad para definir estrategias de mejora en relación a las PyMES, que serán presentadas al gobierno municipal para su análisis y evaluación para su pronta adopción. A la par se generará un catálogo de negocios de PyMES locales, para logara mayos difusión de estos negocios en esta ciudad y la región.

#### RESULTADOS

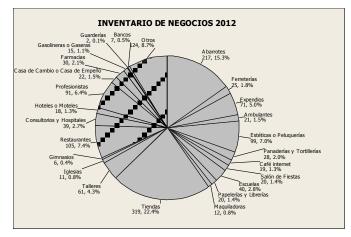
La aplicación del inventario de negocios generó información de primera mano, si bien no en su totalidad, pero de la obtenida se pudieron formular estrategias de solución que permitirán su fortalecimiento y/o desarrollo local y regional. El compromiso que asuma la parte gubernamental, así como las diferentes cámaras y otras organizaciones, será determinante en el éxito de este proyecto. Del análisis de la información se visualiza que las PyMES necesitan avocarse a la búsqueda de procesos de mejoramiento continuo de su capacidad de gestión de los factores de producción. Por ende, también, el mejoramiento de la <u>productividad</u> y la competitividad, para convertir a las empresas en organizaciones innovadoras, emprendedoras, modernas, flexibles y de talla internacional. Se espera obtener como resultado de esta investigación:

- Identificar las oportunidades de mercado para la creación de PyMES con nuevos giros.
- Definir al menos dos estrategias de consolidación para las PyMES al municipio.
- Difundir el catálogo de negocios de Agua Prieta, en búsqueda de posibles inversionistas.

Por lo que con la información obtenida de esta investigación se pretende:

- Identificar las oportunidades de mercado para la creación de PyMES con nuevos giros.
- Definir al menos dos estrategias de consolidación para las PyMES al municipio.
- Difundir el catálogo de negocios de Agua Prieta, en búsqueda de posibles inversionistas.

Figura 1: Empresas Incluidas en el Inventario de Negocios (2011-2012), por porcentaje de giro empresarial.



En la figura 1 se muestra la información de los resultados obtenidos del inventario de negocios aplicados por el Instituto Tecnológico de Agua Prieta y los organismos involucrados en el municipio, donde se indica por colores los giros empresariales de cada una de las PyMES que se encuentran dentro de la muestra que se encuestó, por ejemplo: 15.3 % de abarrotes, 1.8% de ferreterías, 7.4 % de restaurants, etc.

#### CONCLUSIONES

Dados los resultados de la aplicación del mecanismo de recolección de información, se concluye que mediante el análisis de los datos se generó el inventario de negocios de las PyMES el la ciudad de Agua Prieta, ademas se determinó: la cantindad de pequeñas y medianas empresas en el municipio, y sus características, se realizó la agrupación de las PyMES por actividad económica o giro. Se observa que las empresas necesitan dedicar tiempo en la busqueda de procesos de mejoramiento continuo de su capacidad de gestión, y de los factores de producción. Por lo tanto, mejorar la productividad y la competitividad, para convertir a las PyMES en organizaciones innovadoras, emprendedoras, modernas, flexibles y de talla internacional, que se apeguen a los planes y programas que las autoridades municipales propongan en sus planes de desarrollo económico y de las cámaras de comercio locales, buscando disminuir el riesgo de fracaso en sus primeros años de operación, por lo que exiten dos rubros principales que deben ser gestionados por las dependencias correspondientes que son: 1) la comercialización de productos y/o servicios 2) capitalización y fortalecimiento de sus planes operativos. El inventario de negocios realizado, ilustra como se pueden generar diversas estrategías viables para el desarrollo regional en el renglón de PyMES en Agua Prieta, Sonora, como son:

- 1) Incubación de empresas para asesoría y estructuración de planes de negocios, en el Centro de Incubación e Innovación Empresarial del Instituto Tecnológico de Agua Prieta.
- 2) Canalización a diferentes fuentes de recursos federales, estatales o municipales para cubrir sus necesidades referentes a infraestructura y capacitación principalmente.

Las estrategias concretas plantteadas con anterioridad darán pauta a coadyuvar el fortalecimiento y permanencia de PyMES en el municipio de Agua Prieta. Dependerá de las instituciones locales y estatales involucradas, hacer un análisis para impulsar estas propuestas que contribuyen a la permanencia, consolidación y crecimiento de este tipo de organizaciones, buscando además que la mayoría de ellas en lo posible exporten productos y/o servicios, tomado como ventaja competitiva la ubicación geográfica del municipio de Agua Prieta.

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# EL CONTROL PRESUPUESTAL EN LAS MICROEMPRESAS COMERCIALES

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## RESUMEN

El presente trabajo es el resultado de una investigación realizada para conocer la forma en que las microempresas comerciales de Mexicali, Baja California, aplican el control presupuestal en la toma de decisiones sobre la operación de la empresa. El diseño utilizado fue descriptivo transversal, para el cual se siguió un proceso riguroso y formulado de una manera lógica, permitiendo con ello la adquisición del conocimiento del objeto de investigación al obtener datos precisos sobre el tipo de información financiera que elaboran, entre los cuales se encuentran los presupuestos, así como el uso que se les da y la manera en cómo las personas a cargo de este tipo de empresas toman decisiones para el desarrollo de su operación. Para ello se aplicó un cuestionario sobre una muestra de ochenta microempresas de tipo comercial. Los datos obtenidos se analizaron con el apoyo del programa estadístico SSPS, interpretando los resultados obtenidos. En función al estudio realizado se observó que las microempresas elaboran de una manera incipiente los presupuestos así como el control y seguimiento que se les da, en virtud de que la información que elaboran es aquella que les sirve de base para cumplir con sus obligaciones fiscales. En cuanto a la forma de tomar las decisiones estas se realizan principalmente de manera empírica.

PALABRAS CLAVE: Control presupuestal, toma de decisiones y microempresas.

# **BUDGETARY CONTROL IN MICRO BUSINESS**

## ABSTRACT

This work is the result of an investigation to find out how commercial micro Mexicali, Baja California, budgetary control applied in making decisions about the operation of the company. The design was descriptive cross, for which followed a rigorous process and formulated in a logical manner, thereby allowing the acquisition of knowledge of the research object to obtain accurate data on the type of financial information produced, among which budgets are, and the use given to them and the way how people in charge of these businesses make decisions for the development of its operation. We applied a questionnaire on a sample of eighty commercial microenterprises. The data were analyzed using the SSPS statistical program support, interpreting the results. According to the study it was observed that micro incipiently developed a budget as well as control and monitoring that are given, under the information they produce is one that serves as a basis to meet their tax obligations. As for how these decisions are mainly empirically.

## JEL: M19, G00

**KEYWORDS:** Budgetary control, decision making and micro business.

## INTRODUCCIÓN

Las microempresas son de gran importancia en nuestro país ya que representan el 92% de las empresas que existen en México de acuerdo con las estadísticas del Sistema de Información Empresarial Mexicano (SIEM). Esta clase de empresas constituyen la principal fuente de generación de empleo en el país y tiene una alta participación en el Producto Interno Bruto. Al igual que en el resto del territorio mexicano estas empresas contribuyen en gran medida a la economía del Estado de Baja California ya que representan el 81% de las empresas existentes.

Sin embargo debido al tamaño de estas empresas, el poco capital con el que cuentan y la falta de conocimientos de sus propietarios en cuestiones de planeación y administración de sus recursos, les trae como consecuencia que se les presenten algunos problemas como lo son: la falta de control de inventarios, control inadecuado de créditos, liquidez y bajo volumen de ventas, los cuales si no son tratados a tiempo ponen en riesgo a la operación de la empresa al no contar con el efectivo suficiente y por tanto no cumplir en tiempo con sus compromisos de bancos y acreedores o bien un inadecuado financiamiento, una sobre inversión en activo fijo, existencias de inventarios inmovilizadas y obsoletas, irregularidades en los cobros, pagos imprevistos, cálculos equivocados de los ingresos, costos o utilidades así como los gastos excesivos en que incurren los propietarios de estas empresas por un mal manejo y control de sus recursos.

Por ello es importante que las empresas sobre todo aquellos de tamaño y estructuras limitadas tengan un adecuado control sobre sus recursos a través de la elaboración oportuna de su información financiera, de donde surgen los presupuestos de cada una de las áreas que integran a la empresa, estableciendo a su vez un adecuado control presupuestal, de tal forma que se pueda disminuir el riesgo de sus operaciones, proteger y cuidar los recursos con los que cuentan así como evaluar la eficiencia de la misma en cuanto al manejo de sus bienes. El objetivo general de esta investigación es conocer la forma en que las microempresas comerciales de Mexicali, Baja California, aplican el control presupuestal en la toma de decisiones sobre la operación de la empresa.

## **REVISIÓN LITERARIA**

## Concepto Y Características De Las Microempresas

En esta investigación se estudian empresas que pertenecen al sector comercial, entendiendo como empresas comerciales a aquellas que se dedican a adquirir cierta clase de bienes o productos, con el objeto de venderlos posteriormente en el mismo estado físico en que fueron adquiridos, aumentando al precio de costo o adquisición un porcentaje denominado "margen de utilidad" (Rodríguez, 2010). Una vez conocido el concepto de empresa comercial se determinó lo que para esta investigación se utilizará como definición de microempresa comercial, siendo ésta la que se encuentra establecida en la Ley para el Desarrollo de la Competitividad de la Micro, Pequeña y Mediana Empresa, que fue publicada en el

Diario Oficial de la Federación publicado el 30 de diciembre del 2009 ya que la clasificación que se hace de este tipo de empresas en dicho documento es la oficial de acuerdo a la Secretaría de Economía, dicha clasificación es por estratos y se basa en el número de empleados de la empresa. Esta ley establece como microempresas del sector comercio, a aquellas que se encuentren constituidas con 1 a 10 empleados y se dediquen al comercio. Por tanto, una microempresa comercial es la que se dedica a adquirir cierta clase de bienes o productos, con el objeto de venderlos posteriormente en el mismo estado físico en que fueron adquiridos, aumentando al precio de costo o adquisición, un porcentaje denominado "margen de utilidad" y que cuente con 1 a 10 empleados.

Características Generales Y Funcionales De Las Microempresas.

Megginson&Byrd (2006) señalan que las microempresas poseen ciertas características generales que las hacen diferentes al resto de las empresas a través de las cuales pueden ser fácilmente reconocidas. Entre estas características se encuentran las siguientes:

- 1. Sirven a un mercado limitado o dentro de un mercado más amplio a un número reducido de clientes.
- 2. El tamaño de estas empresas corresponde al programa de producción de cada una de ellas y a la capacidad de los empresarios para administrarlas.
- 3. Fabrican productos, con tendencias a cierta especialización y usan procesos sencillos de fabricación.
- 4. Disponen de medios financieros limitados.
- 5. Sus equipos de producción y su maquinaria son sencillos.
- 6. Cuentan con personal reducido.
- 7. Utilizan materias primas locales de fácil acceso, no siempre conservables, o bien productos semiterminados.
- 8. Los empresarios tienen a su cargo las ventas de los productos, o las supervisan personalmente.
- 9. Sus sistemas de contabilidad y de control son elementales.
- 10. Cuentan con una estructura organizacional muy sencilla.

## Principales Problemas Que Enfrentan Las Microempresas

Las microempresas presentan una gran variedad de problemas como lo son: ventas insuficientes, debilidad competitiva, mal servicio, mala atención al público, precios altos o calidad mala, activos fijos excesivos, mala ubicación, descontrol de inventarios, problemas de impuestos y falta de financiamiento adecuado y oportuno. Anzola (2010) refiere que la mayor parte de sus problemas se derivan de la falta de administración de sus empresas, ya que se constituyen sin planeación, sus dueños y personal son ajenos a la administración del giro del negocio, utilizan técnicas y procedimientos obsoletos, casi siempre operan con una constante falta de recursos, su compras las realizan con mucha frecuencia a través de intermediarios, no conocen de los apoyos financieros y fiscales que en raras ocasiones les ofrecen las instituciones financieras y las leyes fiscales, y padecen la ausencia de asesoría especializada.

Regularmente estas empresas tienen problemas de carencia de efectivo por falta de una planeación financiera adecuada y el exceso en inversión de cuentas por cobrar de clientes, ya sea por créditos amplios o por atraso en su cobranza, o bien la combinación de ambos. Otros problemas que enfrentan son las deficiencias en las negociaciones de los financiamientos a corto plazo y el exceso en inversión de inventarios originada por una planeación deficiente o por inversiones muy diversificadas, las cuales no producen rendimientos normales, así como la falta de una rotación adecuada y generación de inversiones obsoletas (Barragán, 2009). Asimismo Belasteguigoitia (2009) refiere que las microempresas por su tamaño tienen ventajas, tal como su facilidad administrativa, pero, por su mismo tamaño tienen desventajas, tales como razones de tipo económico, viven al día de sus ingresos, por lo tanto se les dificulta crecer, y estas mismas razones ponen en peligro su existencia. Todo esto resultado de una administración empírica por parte del dueño, que afecta el rendimiento general de la empresa. La mayoría de los negocios nuevos cometen al menos dos errores importantes:

- a) No hacen una adecuada estimación de las necesidades de capital de trabajo.
- b) Frecuentemente hacen una provisión demasiado cuidadosa de capital fijo.

Otro de los problemas de carácter financiero para las microempresas es que en la mayoría de los casos las empresas no evalúan si lo que necesitan es dinero o capital, estos conceptos no forman parte de su

lenguaje cotidiano y en algunas ocasiones obtienen préstamos que no necesitan, por ello es que las empresas requieren elaborar presupuestos y establecer la forma en cómo deben de darles seguimiento. (Villegas & Ortega, 2009) Es importante que exista en toda empresa una buena relación de los activos circulantes con los pasivos circulantes y cuidar su liquidez, la cual es necesaria para cumplir con sus compromisos (Moreno, 2009). Por ello Gómez, Rodríguez& Alcaraz (2009) señalan la importancia de que las personas que se encuentran a cargo de este tipo de empresas dediquen buena parte de su tiempo a la administración eficiente del capital de trabajo (activos y pasivos circulantes) con el propósito de maximizar el valor de su empresa.

#### Control Presupuestal

Un presupuesto es una técnica de planeación y predeterminación de cifras sobre bases estadísticas y apreciaciones de hechos y fenómenos aleatorios, en este sentido se considera al presupuesto como una herramienta de la administración. Siendo definido por Burbano (2011) como una estimación programada, en forma sistemática, de las condiciones de operación y de los resultados a obtener por un organismo, en un período determinado. Los objetivos de los presupuestos son de previsión, planeación, organización, coordinación o integración, dirección, control; es decir, comprenden o están en todas las etapas del proceso administrativo. Los presupuestos están ligados al tipo de empresa, a sus objetivos, organización y necesidades; su contenido y forma varían de una entidad a otra, principalmente en el grado de análisis requerido, por lo cual es indispensable el conocimiento amplio de las empresas, objetivos y necesidades en que se hayan de aplicar. La preparación del presupuesto se basa en el principio de que todas las transacciones de la entidad están íntimamente relacionadas, de tal forma que si una determinada parte del plan pudiera ser tomada como punto de partida, el resto del mismo podría ser establecido con un grado razonable de seguridad y certeza, permitiendo a la gerencia tomar decisiones adecuadas.

Cárdenas & Nápoles (2008) refieren que al momento de la elaboración del presupuesto se debe designar a una persona como director la cual actuara como coordinador de todos los departamentos que intervienen en la ejecución del plan. La sincronización de las diferentes actividades se hará elaborando un calendario, en que se precisen las fechas en que cada departamento deberá tener disponible la información necesaria, para que las demás secciones puedan desarrollar sus estimaciones. De esta manera será necesario también que toda la información obtenida y las estimaciones realizadas sean enviadas al director del presupuesto, centralizándose en él la programación de actividades.Del Río (2009) señala que el control presupuestal es un instrumento en el que se basan las empresas para dirigir todas sus operaciones, lo anterior se logra a través de la comparación sistemática del conjunto de previsiones establecidas para cada uno de sus departamentos, con los datos históricos que refleja la contabilidad durante el mismo periodo.

El control presupuestal indica la coordinación de las actividades de los diversos departamentos de la organización, por medio de la estructuración de un plan, cuyas partes forman un conjunto coherente e indivisible, en el que la omisión de cualquiera de sus secciones afectaría el logro de los objetivos deseados. Se puede decir que control presupuestal tiene como reflejo el conjunto de presupuestos parciales, correspondientes a cada una de las diferentes actividades de una entidad.Otro de los requisitos que deben tomarse en cuenta para la integración del control presupuestal, es la fijación del lapso que comprenden las estimaciones. La determinación de este periodo opera en función de diversos factores, tales como: estabilidad o inestabilidad de las operaciones de la empresa, el periodo del proceso productivo y las tendencias del mercado, entre otros.

## METODOLOGÍA

La investigación que se presenta en este trabajo fue realizada en las microempresas comerciales de Mexicali, B. C. con el objetivo de conocer la forma en que las microempresas comerciales de Mexicali, Baja California, aplican el control presupuestal en la toma de decisiones sobre la operación de la empresa.

La metodología seguida para su desarrollo se efectuó en dos etapas, en la primera parte se llevó a cabo la revisión y análisis de bibliografía en libros, revistas, periódicos y documentos electrónicos relacionados con el tema de estudio. En la segunda parte se realizó un estudio de campo, mediante la aplicación de un cuestionario a las personas a cargo de la administración y funcionamiento de este tipo de empresas.

Para determinar el universo, tamaño de la población, muestra y sujetos de este estudio, se tomó como marco muestral la información proporcionada por el Sistema Empresarial Mexicano, el cual cuenta con un registro de empresas, clasificadas de acuerdo a su entidad, municipio, tamaño y sector, además de ser el padrón más completo y actualizado que existe hasta este momento. En el municipio de Mexicali existen actualmente 1498 microempresas comerciales ubicadas en la zona urbana registradas en este padrón, lo cual representa al universo y población de esta investigación. Una vez determinada la población de estudio se llevó a cabo el cálculo del tamaño de la muestra, utilizando para ello una fórmula para poblaciones finitas. Considerando un nivel de confianza de 90% y un error estimado de 5%, la muestra para este estudio es de:

$Z^2 p q N$	$(1.645)^2(.08)(0.92)(1498) = 75.72$
$n = \frac{1}{NE^2 + Z^2 p q}$	$n = \frac{(1010)(100)(100)(100)}{(1498)(.05)^2 + (1.645)^2(.08)(0.92)} = 75.72$

Lo anterior significa que la muestra corresponde a 76 microempresas comerciales ubicadas a las cuales se debe aplicar el instrumento de medición. Sin embargo, se determinó finalmente aplicar el instrumento de medición a 80 microempresas comerciales. Calculado el tamaño de la muestra se determinaron los elementos muéstrales para la aplicación del instrumento de medición.

## Sujetos

La selección de los sujetos de la muestra se basó en el padrón proporcionado por el SIEM, del cual fueron tomadas para este estudio las microempresas dedicadas a la actividad comercial, aplicando un cuestionario a los propietarios, administradores, contadores y encargados que operan estas empresas ya que son estos quienes tienen el conocimiento y la experiencia de las operaciones, recursos, información y la forma en que se toman las decisiones sobre su funcionamiento.Para determinar cuáles serían las microempresas en donde se aplicarían los cuestionarios, y que todas tuvieran la misma probabilidad de ser elegidos, se utilizó un proceso sistemático de elementos muéstrales, el cual consiste en tomar el número total de la población de estudio, en este caso las 1498 microempresas comerciales, y el número de empresas resultado del tamaño de la muestra, es decir las 80 microempresas, obteniendo con ello un intervalo, el cual nos sirve para poder determinar las empresas a encuestar. Para conocer este intervalo se utilizó la siguiente fórmula:

K = N/n	Donde:
K= 1498/80	K= Intervalo
K= 18.72 redondeado 19	N= Población
	n= Muestra

Una vez conocido el intervalo el siguiente paso fue seleccionar a la primera empresa a encuestar y a partir de ésta aplicar el intervalo determinado con la fórmula anterior.

#### Instrumentos

Para la realización de esta investigación se diseñó un instrumento de medición, en la modalidad de cuestionario con preguntas de opción múltiple en su mayoría, a excepción de las preguntas de identificación e información general. Se determinó la utilización de un cuestionario por ser éste un instrumento de apoyo que permite recolectar datos de un gran número de individuos, en este caso las personas a cargo de las microempresas comerciales de la zona urbana de Mexicali. El cuestionario consta de un conjunto de 22 preguntas relacionadas con las variables a medir.

El cuestionario se estructuró en cuatro apartados: identificación e información general, información financiera, administración de sus recursos financieros y problemas que enfrentan este tipo de empresas, para lograr un mejor orden, relación y análisis de las respuestas. Una vez obtenida la información se observó la frecuencia de cada respuesta, las cuales fueron clasificadas por categorías y se señaló el número de frecuencias de mención utilizando como apoyo el programa estadístico SPSS.

#### RESULTADOS

En este capítulo se presentan los principales resultados de la aplicación del cuestionario aplicado en 80 microempresas comerciales de Mexicali.

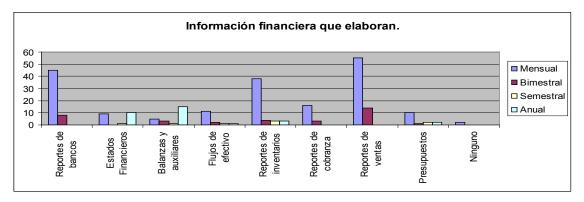
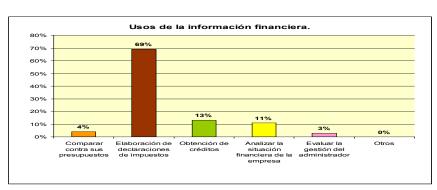


Figura 1: Información financiera que elaboran, usos y periodicidad

Fuente: Elaboración propia con datos de los resultados

Respecto a la información financiera se encontró que principalmente en este tipo de empresas se elaboran los reportes de ventas de manera mensual, así como la elaboración de los reportes bancarios con la misma periodicidad y los reportes de inventarios. Se puede observar que este tipo de información no ofrece elementos suficientes para llevar a cabo una toma de decisiones adecuada sobre la situación financiera de la empresa y sus operaciones. Esta información coincide con lo mencionado en el marco teórico de esta investigación, donde se señala que la contabilidad la mayoría de las veces es llevada de manera superficial y no se elaboran estados financieros detallados, por lo que existe una falta de control en esta área.



## Figura 2: Señale los usos que le da a esta información financiera

Fuente: Elaboración propia con datos de los resultados

Una vez que se conoció el tipo de información que principalmente elaboran estas empresas, es importante conocer el uso que le dan a esta, resultando que el 69% de las personas encuestadas la utilizan para llevar a cabo la determinación de sus impuestos y elaborar sus respectivas declaraciones, no así para analizar la situación financiera de su empresa, ya que sólo el 11% respondió utilizarla para ese fin; el 13% elabora la información para la obtención de créditos, ya que es un requisito en el caso de las instituciones bancarias para determinar si se otorga o no el crédito, 4% la utiliza para comparar contra sus presupuestos y el 3% para evaluar la gestión del administrador.

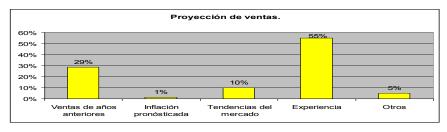
Figura 3: Señale los presupuestos que elaboran



Fuente: Elaboración propia con datos de los resultados

El 70% de las personas encuestadas no elaboran ningún tipo de presupuestos sobre las operaciones de sus empresas, sólo el 10% elabora el presupuesto de ventas, 7% el presupuesto general, 5% el de compras, 3% el de egresos, 2% el de otros ingresos y productos y el 1% únicamente prepara el presupuesto de flujos de efectivo. Como podemos observar, son las ventas el aspecto más importante que resulta de interés para analizarlo a través de un presupuesto, sin tomar en cuenta los gastos que llevan consigo estas ventas y que en ocasiones pueden ser mayores a ellas.

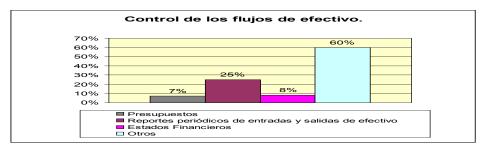
#### Figura 4: Información para proyectar sus ventas



Fuente: Elaboración propia con datos de los resultados

En relación a como proyectan sus ventas las personas que se encuentran administrando este tipo de empresas, se observó que la mayoría de ellas lo hacen con base a la experiencia, siendo el 55% del total de las empresas encuestadas quienes las proyectan en esa forma. El 29% lo hacen tomando en cuenta las ventas de años anteriores y sólo el 10% en base a las tendencias del mercado. Es de llamar la atención que sólo el 1% tome en consideración a la inflación para proyectar sus ventas, pues si bien ésta ha tenido un comportamiento estable en los últimos años, es un factor que no debe de dejarse de lado al momento de hacer proyecciones, ya que el poder adquisitivo se ve afectado por el transcurso del tiempo.

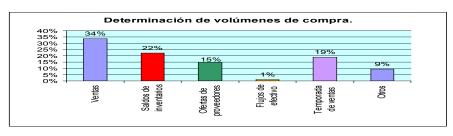
Figura 5: Cómo controla sus flujos de efectivo



Fuente: Elaboración propia con datos de los resultados

En cuanto al control de los flujos de efectivo generados por la operación diaria de la empresa se tiene que el 60% no tiene un control del efectivo o lo hace mediante otros controles; sólo un 25% de las personas encuestadas lleva a cabo la elaboración de reportes periódicos de entradas y salidas de efectivo. Esta es una herramienta financiera que ayuda a tener un mejor conocimiento sobre la forma en que se está aplicando el efectivo generado y las fuentes que lo están generando; de esta manera se puede determinar si se está administrando bien o no el activo más líquido de la empresa y evitar con ello problemas de liquidez. En tanto el 8% lo hace a través de sus estados financieros y el 7% en base a sus presupuestos.

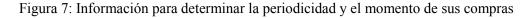
Figura 6: Información para determinar sus volúmenes de compras

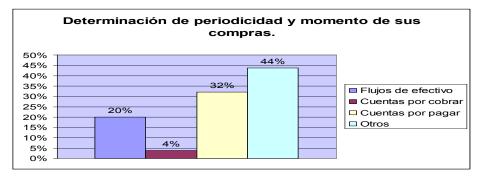


Fuente: Elaboración propia con datos de los resultados

En lo que se refiere a los volúmenes de compra, se encontró que el 34% los determina tomando como base a las ventas que se generan, el 22% lo hace a través de los saldos de los inventarios, en tanto que el 19% los determina en relación a la temporada de ventas y un 15% en base a las ofertas que le hacen los proveedores (lo cual puede generar un exceso en sus inventarios), 9% a través de otros mecanismos y el 1% en relación a sus flujos de efectivo.

En el caso de la información en base a la cual se determina la periodicidad con que se compra y el momento en que éstas deben ser realizadas, se detectó que el 32% lo hace tomando en cuenta las cuentas por pagar, determinando lo que se debe a sus proveedores y acreedores y la fecha en que se cubrirán; el 20% lo hace en base a sus flujos de efectivo. En la mayoría de los casos, que representan al 44% de los encuestados, resultó que utilizan otro tipo de información para determinar el momento de comprar, o bien no se basan en ningún tipo de información.





Fuente: Elaboración propia con datos de los resultados

Figura 8: Mecanismos que utiliza para el control de sus inventarios y periodicidad



Fuente: Elaboración propia con datos de los resultados

Respecto a la forma en que controlan los inventarios las personas que administran a este tipo de empresas, se encontró que el 57% efectúa inventarios físicos para su control con diferente periodicidad, siendo mensuales los que se realizan con mayor frecuencia. Por otra parte, el 20% de los encuestados señalaron los reportes de venta mensual como el medio utilizado para tener un control de sus inventarios y el 13% no aplica ningún mecanismo para su control, situación que puede provocar que se realicen compras que no sean necesarias, excesos en los inventarios e incluso que se lleven a cabo hurtos sin que estos puedan ser detectados. Todas estas situaciones tienen repercusiones en la liquidez de la empresa. Un 10% lo hace a través de tarjetas de almacén y sistemas de cómputo.

## CONCLUSIONES

En función a la investigación realizada se puede concluir que el control presupuestal resulta de vital importancia en las microempresas, debido a que gracias a su utilización le permite a las personas a cargo de su operación, medir el desempeño de su empresa con la finalidad de corregir desviaciones encontradas, así como permitirle determinar las acciones correctivas. Sin embargo la mayoría de las microempresas comerciales no utilizan los presupuestos como una herramienta de planeación y control, o bien lo hacen de manera incipiente. De acuerdo a lo investigado se realizan las siguientes recomendaciones:

La empresa debe elaborar presupuestos que le permitan principalmente administrar su efectivo, que es la base de la operación de toda empresa. Dando un seguimiento al comportamiento de las diferentes áreas y recursos con que cuenta la empresa, como son sus: inventarios, cuentas por cobrar y cuentas por pagar, principalmente debido a que forman parte del capital de trabajo de la empresa el cual es de vital importancia para el desarrollo de las empresas.

Asimismo se debe controlar a través de los presupuestos previamente elaborados las entradas y las salidas de efectivo del período, con la finalidad de evitar incumplimiento en los compromisos de pago a corto plazo, lo recomendable es que sea mensual y si es posible realizarlo de manera semanal.

Aunado a lo anterior, los microempresarios, deben de tener especial cuidado con las adquisiciones de inventarios, los cuales representan inversiones a corto plazo que son las que más les afectan, por lo que se les sugiere que traten de evitar inversiones innecesarias en este rubro, ya que esto conlleva a costos elevados, a través de un control adecuado del presupuesto de adquisiciones de sus productos.

Analizar periódicamente los costos y gastos en los que se incurren, con la finalidad de reducir aquellos que sean innecesarios.

Poner atención a los presupuestos de inversiones en activos fijos, para analizar los periodos en los cuales se va a recuperar dicha inversión y los rendimientos que puede generar, así como la forma en la cual se llevarán a cabo las amortizaciones cuidando no afectar la liquidez de la empresa.

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# APLICACIÓN DEL DIAMANTE DE COMPETITIVIDAD DE PORTER EN LA INDUSTRIA DE CARNE DE CERDO EN EL ESTADO DE SONORA

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## RESUMEN

Las principales actividades económicas en Sonora son: ganadería, minería, pesca y agricultura. Recientemente la industria maquiladora y de producción de alimentos han tenido auge en el estado. Las ciudades más importantes en el sector económico son: Hermosillo, Ciudad Obregón, Nogales, Guaymas, Navojoa, San Luis Río Colorado, Agua Prieta, Caborca y Puerto Peñasco, entre las ciudades culturales destacan: Álamos, Arizpe, Ures, Magdalena de Kino, el Centro Histórico de Hermosillo y los pueblos aledaños al Río Sonora. Dado el estatus fitosanitario que mantiene Sonora y la alta calidad de los productos cárnicos de cerdo, la producción ha mantenido el alza, con un promedio de 217 mil toneladas, lo cual posiciona a este Estado como uno de los principales productores, a la par con Jalisco. En promedio el crecimiento ha sido de 1% en los últimos años, gracias a la calidad, inocuidad y presentación, ha permitido que este producto se abra paso entre los mercados asiáticos, principalmente Japón. El valor de las exportaciones de carne de puerco en el Estado durante el 2011, se incrementó en 89 millones de dólares más con respecto al obtenido en el 2005, presentando un crecimiento de 9.2% dentro del periodo referido. (Diario la Tribuna, 2012).

PALABRAS CLAVE: Actividad económica, carne de cerdo, valor de las exportaciones

# APPLICATION OF THE PORTER'S COMPETITIVENESS DIAMOND IN THE PORK INDUSTRY IN THE STATE OF SONORA

## ABSTRACT

The main economic activities in Sonora are: farming, mining, fishing and agriculture. Recently the maquiladora industry and food production have been booming in the state. Major cities in the economic sector are: Hermosillo, Ciudad Obregon, Nogales, Guaymas, Navojoa, San Luis Rio Colorado, Agua Prieta, Caborca and Puerto Peñasco, amongst cultural cities are: Los Alamos, Arizpe, Ures, Magdalena de Kino, Hermosillo's Historical Center and surrounding villages to Rio Sonora<sup>1</sup>. Given the phytosanitary status maintained by Sonora and the high quality pork products, production has remained the rise, with an average of 217 000 tonnes, which positions the state as one of the leading producers, along with Jalisco. The average growth was 1% in recent years, thanks to the quality, safety and presentation, has allowed this product to break through Asian markets, especially Japan. The value of exports of pork in the State during 2011, increased by \$ 89 million more compared to that obtained in 2005, a growth of 9.2% in the aforementioned period. (Daily Tribune, 2012).

## **JEL:** M00

KEY WORDS: Economic activity, pork meat, export value

## INTRODUCCIÓN

La porcicultura en el mundo, es una actividad sumamente importante, dado que en los últimos 20 años ha logrado sostener un crecimiento económico altamente significativo. En 1990, esta actividad económica contabilizaba a nivel mundial 860 millones de animales, para el 2000, (diez años después) la población alcanzo a 910 millones de cabezas y para el 2008 la población superó los 965 millones de cabezas. La producción de cerdos crece en el mundo y el consumo también. Actualmente, los principales países productores de cerdo en el mundo son: China, con una piara cercana a los 600 millones de cabezas, mismos que representan un poco más del 50% de la producción mundial, en segundo lugar se encuentra la unión Europea (UE) con la más alta eficiencia productiva y mayor consumidor de cerdo por habitante, después esta Estados Unidos de Norte América (EU) y finalmente Brasil, entre los de mayor producción y crecimiento. La carne de cerdo en México, todavía no goza plenamente de ser apreciada como una excelente comida, de variadas y exquisitas combinaciones como sucede en otras partes del mundo. En rigor, no existen razones para que la carne de cerdo no se consuma más y a mayor velocidad. Su precio es competitivo y su manejo sanitario es tan eficiente como el de las otras carnes, tal situación ha permitido mantener niveles progresivos de exportación de canales y cortes especiales a países sumamente exigentes en sus normas sanitarias, como son: Japón, Corea del Sur, Rusia y otros, los Estados que se distinguen por ser los principales productores son: Jalisco, Sonora, Guanajuato y Yucatán. (Meraz, 2011).

#### Perfil Del País

México. Los Estados Unidos Mexicanos nombre oficial de México, cuenta con una superficie territorial de 1.964.375 km<sup>2</sup> y se encuentra situado en el hemisferio norte del Continente Americano en América del Norte. La economía de México es 12va más grande del mundo en términos nominales y del 11 por paridad de poder adquisitivo, según el Banco Mundial, en el 2011 registró un PIB total de 1, 683 trillones de dólares, el cual está compuesto de la siguiente forma: Agricultura 3.8%, industria 34.2 %, servicios 62 %; con un ingreso per cápita de 14,800.00 dólares.

#### Perfil Del Estado, Sonora

El Estado de Sonora está situado en el noroeste de México, en América del Norte. Sus costas son bañadas por el Mar de Cortés o Golfo de California. Sonora se encuentra así vinculado a la denominada «Cuenca del Pacífico», que ofrece amplias posibilidades de desarrollo económico y múltiples retos y oportunidades de aprovechamiento sustentable de sus recursos naturales. Sus fronteras con los estados estadounidenses de Arizona y Nuevo México permiten múltiples conexiones económicas, culturales y políticas con los Estados Unidos de América.Sonora es el cuarto estado con menor tasa de analfabetismo, el grado promedio de escolaridad de la población es de 15 años lo que equivale a poco más de la secundaria concluida, es decir, en Sonora 3 de cada 100 personas de 15 años y más no saben leer ni escribir, en este aspecto la media nacional son 7 de cada 100 personas. Además, la entidad cuenta con diversas instituciones públicas y privadas. En la actualidad se encuentra en el lugar 29 a nivel nacional en capacitación para el trabajo.

## Análisis De La Industria A Nivel Internacional

La producción porcina mundial en el año 2012 presenta un alza de 924,000 toneladas a 104,4 millones de toneladas, desde la última revisión. China, la UE y los Estados Unidos de América (EE.UU.) representan la mayor parte del crecimiento. Las exportaciones se incrementan de 440,000 toneladas a 7,0 millones de toneladas, con una mayor demanda de los principales países importadores para EE.UU., se prevé una mayor producción y exportación, mientras que sus importaciones se reducen ligeramente. La producción Mundial muestra un alza para todos los productores importantes. China está prevista de 320,000 toneladas a 51,6 millones de toneladas. El Gobierno apoya también al fomentar la expansión y la mejora

genética porcina. Los brotes de enfermedades son menos frecuentes debido al clima favorable y los esfuerzos de vacunación. La Unión Europea (UE) sube de 135,000 toneladas a 22,6 millones de toneladas, mejora la eficiencia en la cría porcina, reestructuración de la industria. Los Estados Unidos pronostican de 96.000 toneladas a 10,6 millones de toneladas debido al aumento de la producción de cerdos de peso ligeramente más pesados.

#### Análisis De La Industria A Nivel Nacional

En México la porcicultura empezó con la llegada de los españoles, pero la práctica intensiva de esta actividad surgió en los años 70's, cuando se empezó a urbanizar el país, así como también, con el inicio de las exportaciones de tecnología norteamericana para la producción industrial de estas especies, generando un mayor rendimiento en la producción de la carne con menores costos en alimentación, así como también ahorro del tiempo invertido. Estos cambios propiciaron que la porcicultura se convirtiera en la actividad más dinámica del sector agropecuario, siendo el producto cárnico de mayor consumo entre los mexicanos, llegando a constituirse esta actividad en la más avanzada de América Latina desde el punto de vista tecnológico. A pesar de los adelantos tecnológicos y productivos alcanzados por la porcicultura desde la década de los 70's hasta a mediados de los 80's, no se pudo modificar el esquema de producción porcícola del país, ya que actualmente las granjas porcícolas se encuentran divididas en tres estratos de producción: Explotaciones altamente tecnificadas o integradas, granjas semitecnificadas y explotaciones de traspatio. Tanto las importaciones como la producción de carne de cerdo se han aumentado en México porque existe una mayor demanda por parte de los consumidores sobre todo desde 1995, ya que los ingresos han mejorado, de tal manera que ahora los consumidores buscan cortes de mayor calidad y más caros, por otra parte otro factor que ha contribuido al crecimiento de la industria es que las plantas mexicanas han desarrollado su capacidad de sacrificio, no solo con el fin de satisfacer la demanda nacional, sino para incrementar sus exportaciones principalmente hacia el mercado japonés.

## Generalidades De La Carne De Cerdo

En los últimos años se han obtenido importantes avances en la aplicación de un esquema integral de vacunación porcícola, lo que conlleva a que se reduzca el impacto negativo que tienen las enfermedades sobre la economía de las granjas porcícolas. No obstante la mejora de los esquemas de inspección, en 2007 se detectó en México la enfermedad de circovirus porcino (PCV2), la que no existía en el país y que previsiblemente fue internada mediante la importación de ganado (pie de cría, para engorda o para sacrificio directo). Lo anterior conllevó al establecimiento de una alerta sanitaria para reducir la propagación del virus y para la definición de acciones para su control. Dentro de las acciones autorizadas bajo el análisis de especialistas y autoridades se encuentra la autorización para la importación de vacuna y el trabajo de la Productora Nacional de Biológicos Veterinarios para la producción de la vacuna en el país, a fin de reducir su costo y beneficiar a los porcicultores de México, lo cual conllevó a la mejora de la productividad en las granjas. Fiebre Porcina Clásica (FPC) Con la declaratoria como libres de FPC de los estados que conforman la región Centro-Occidente, se obtuvo un importante avance ya que se logró la erradicación de esta enfermedad en una de las zonas de mayor producción porcícola del país y en la que se ubican una gran cantidad de pequeñas granjas y de explotaciones de traspatio.

Una vez establecida la declaratoria de libertad de los estados de esta región, se han iniciado los trámites para su reconocimiento internacional y que ello facilite la concurrencia de productos obtenidos en esta zona, a los mercados del exterior. Enfermedad de Aujeszky (E.A.) En el último trienio del 2008 se obtuvieron avances importantes en la erradicación de esta enfermedad, habiendo sido declarados como libres 9 estados del país (Aguascalientes, Guerrero, Nuevo León, Puebla, San Luis Potosí, Tamaulipas, Tlaxcala, Veracruz y Zacatecas). Al finalizar el año 2008 se contaba con 18 estados libres de E.A., 4 en fase de erradicación y 10 en fase de escasa prevalencia.

#### Estado Del Clúster

1.- El Profesor Porter indica que debe existir masa crítica de compañías locales o subsidiarias de compañías foráneas que han pasado la prueba de mercado. De acuerdo a las cuatro precondiciones para la activación y desarrollo del clúster, herramienta del Profesor Michael Porter, se cumple de manera general con ellas, por lo que se afirma que si bien dicho clúster se ubica en la fase de crecimiento, se visualiza su potencial desarrollo en el Estado de Sonora, México. Lo anterior, dado que Sonora es el primer Estado que implementa y crea la Comisión para la Certificación del Cerdo Seguro, el cual incluye un posicionamiento satelital de la granja mediante sistemas de información geográfica (SIG), para facilitar la rastreabilidad de los animales que entran y salen de la granja y de los insumos que se emplean para saber si se reduce o se elimina el uso de antibióticos en las diversas etapas, de destete, desarrollo, crecimiento y finalización del cerdo. Así mismo, Sonora ostenta el primer lugar en tecnificación de granjas porcícolas,

con tecnología avanzada, calidad genética y certificación sanitaria, lo que coloca a la actividad como el sistema productivo más dinámico, debido a que cuenta con tecnología de punta para su proceso de producción. Por otro lado, el Estado de Sonora se encuentra libre de fiebre porcina clásica y además por el acuerdo de asociación económica con Japón celebrado el 17 de Septiembre del 2004 y que entró en vigor en Abril del 2005, con lo cual se reducirán los aranceles de un 4.3% a un 2.2%, así mismo, Japón permitirá importaciones de 80,000 toneladas, mismas que al 2004 fueron de 38,000, lo que provocará una reducción en los precios de los cortes de cerdo, dando lugar a un incremento en ventas y un desarrollo de la actividad, lo que hace suponer que puede ser una fuente viable de inversión y generadora de empleos El estado de Sonora tiene un alto potencial de crecimiento en lo que se refiere a la porcicultura en todas sus etapas, desde la producción en granjas, pasando por las plantas de sacrificio y proceso y terminando con la comercialización principalmente la exportación, ya que reúne todos los recursos para lograrlo, como por ejemplo: el estado ha sido declarado libre de fiebre porcina clásica y además posee tanto mano de obra calificada como profesionistas e investigadores del área.

2. El Profesor Porter indica que deben existir algunas ventajas significativas específicas del clúster en el diamante que son de importancia particular para el clúster (demanda única, talento especializado, ubicación favorable, un marco regulatorio confiable y apropiado importante para el clúster)

- La región del clúster identificado se caracterizada por tener las condiciones de los factores muy favorables.
- Cuenta con certificado de calidad cárnica, TIF, además de la certificación y verificación agroalimentaria.
- Posicionamiento satelital de la granja de cerdos mediante sistemas de información geográfica, denominados "Sonora Cerdo Seguro".
- Existe un marco regulatorio apropiado: Ley de Desarrollo Rural Sustentable, Ley de Inversiones Extranjeras y las nuevas regulaciones en materia arancelaria, Normas Mexicanas, Secretaría de Comercio y Fomento Industrial, Secretaría de Economía. Confederación de Porcicultores Mexicanos, A.C. Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación.
- El clúster cuenta con una ubicación estratégica hacia dentro y fuera del país.

3. El Profesor Porter indica que debe existir la presencia de una compañía multinacional de clase mundial en el clúster con inversión importante en el país-región y un compromiso de crecimiento.

• Varias empresas pertenecientes al clúster porcicola de Sonora exportan bajo su propia marca.

- El Grupo Kowi es la franquicia sonorense del clúster que destaca por su cortes finos, a nivel nacional e internacional. Cuenta con cobertura nacional con 7 sucursales y 19 tiendas, tiene presncia en los principales autoservicios y empacadoras a nivel nacional. Exporta a Japón, EE.UU. y Corea.
- El Grupo Valmo, exporta a Japón a través de una compañía taiwanesa. Entre sus planes está el establecer una alianza estratégica con una compañía japonesa para expandirse en los mercados de Asia e incursionar en Estados Unidos.
- El Grupo SASA exporta sus cortes a través de la comercializadora Carnes Ricco, SASA es una planta Tipo Inspección Federal (T.I.F. 57), certificada en SQF 2000 y por alcanzar altos estándares de calidad, sanidad e higiene

4. De igual manera se sugiere encontrar la fortaleza en la relación entre clúster o clústeres.

- Existe relación con clúster agroalimenticio.
- Hay participantes del clúster unidos en asociaciones como La Confederación de Porcicultores Mexicanos, el Consejo Nacional Agropecuario, el Consejo Coordinador Empresarial, la Organización Iberoamericana de Porcicultores, entre otros.

#### Análisis De Porter

A continuación se desarrollará un análisis para el clúster de la carne de cerdo en el estado de Sonora, utilizando las herramientas sugeridas por el Dr. Porter, además de un análisis FODA.

#### Análisis FODA

Fortalezas	Debilidades		
a) Alta calidad de las materias primas	a) Escasa información de mercados		
b) Favorable ubicación geográfica	b) Lentitud de inspección en los retenes		
c) Capacidad instalada disponible	c) Alto costo financiero para apoyar al crecimiento de las empresas		
d) Capacidad de respuesta	d) Alto costo de peaje que encarece costos de transporte		
e) Dominio del idioma ingles	e) Mal servicio ferroviario		
f) Área libre de fiebre porcina clásica	f) Deficiencia en los servicios que prestan algunos parques industriales		
	g) Política fiscal impositiva que afecta a la pequeña y mediana		
	empresa		
	h) Escasa vinculación entre centros de inv. universidades y empresas		
	i) Carencia de un modelo estratégico de exportación		
Amenazas	Oportunidades		
a) Variaciones en los precios internacionales	a) Facilidades a la inversión extranjera		
b) Cambios bruscos en la demanda	b) Elevada disposición y oportunidades para asociarse con empresas mexicanas exportadoras		
c) Inflación e inestabilidad en las políticas financieras			
que afectan los costos	c) Sobreoferta de trabajadores calificados		
d) Aumento de trabas y burocratismo	d) Buena respuesta de los productores locales hacia la apertura comercial		
e) Creciente competencia debido a la apertura de mercados	e) Existencia de infraestructura y personal calificado para la investigación sobre la industria alimentaria		
mercados	f) Existencia de un acuerdo de asociación económica con Japón		
	1) Existencia de un acuerdo de asociación ceonónica con sapón		
Cadena de valor			
adena de Valor: Actividades de soporte			
nfraestructura			
stalaciones construidas bajo ciertas especificaciones técnicas.			
	para mejorar la conversión alimenticia, reducir costos e inseminación		
tificial	I		
quipo de abastecimiento de alimentos y cuidado a los cerdos.			
dministración de Recursos Humanos			
pacitación para el cuidado y atención de las granjas de cerdo.			
stencia técnica en tratamiento y conservación de carnes y sanidad.			
sarrollo de Tecnología.			
conicas de reproducción			
encus de reproducción			

Mejora genética. Técnicas de nutrición y alimentación animal. Aplicaciones en la mejora y control de la salud animal. Aprovechamiento de residuos y subproductos. Técnicas de bioconservación en el envasado y embalaje de productos cárnicos. El 60% de las granjas tecnificado, 20% semi-tecnificado y 20% traspatio.				
Adquisición. Transporte. Maquinaria. Vacunas y medicamentos. Alta dependencia de importación de maquinaria para la industria de la carne de cerdo. ACTIVIDADES DE VALOR				
Logística Interna	Operaciones	Logística Externa	Marketing y Ventas	Servicios post venta
Piegoster interna Pie de cría. Alimento. Medicinas y vacunas. Transporte para carga y descarga de animales. Mallas perimetrales. Sistemas de lavado y desinfección de instalaciones. Almacén de cerdos.	Sacrificio. Procesamiento. Empaque. Continua modernización del proceso operativo (alta tecnificación en los procesos).	Refrigeración Conservación Distribución nacional. Distribución internacional.	Promoción de las medidas sanitarias. Campañas de publicidad por empresa. Congresos para replicar mejores prácticas en la industria pecuaria (desarrollo sustentable del sector, mejora de políticas agroalimentarias del país). Páginas de internet por cada empresa.	No hay información disponible.

Fuente: Propia

#### <u>Hallazgos</u>

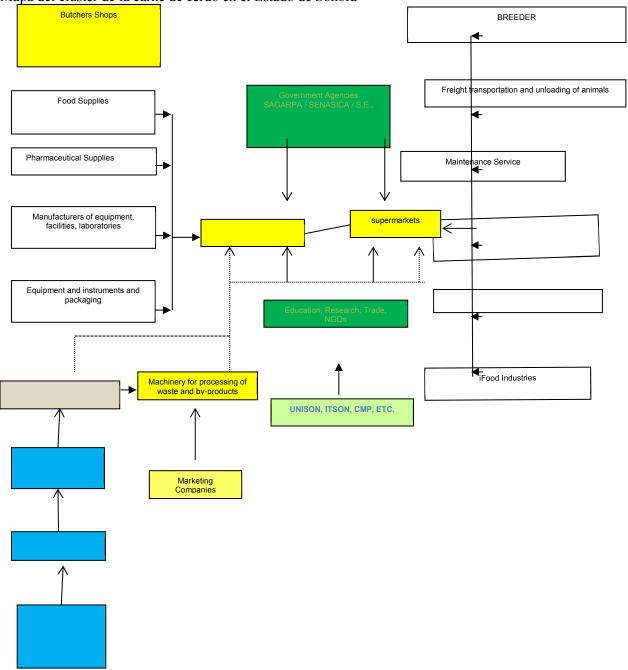
A pesar de los aranceles, cuotas y salvaguardas impuestas en los principales mercados importadores como Rusia y Japón, las exportaciones mundiales de carne continuarán creciendo. Se pronostica un incremento en el consumo, producción y exportación mundial de las carnes en general. Los factores que influirán en este comportamiento son: la liberación del comercio, el mejoramiento de la eficiencia productiva, un desarrollo económico y el crecimiento de la población; por otra parte, las preferencias de productos selectos (vísceras, ciertos cortes orgánicos libres de hormonas, etc.) han creado oportunidades para los exportadores, además el comercio mundial de carne de cerdo está creciendo más rápido para los cortes especiales que para los canales, de ahí que los proveedores están enfocándose en conocer de una manera más eficiente las necesidades específicas de los mercados.

## CONCLUSIONES

El estado de Sonora cuenta con una serie de características favorables para la comercialización de la carne de cerdo como lo son: Adecuada ubicación geográfica, alta calidad de materia prima, área libre de fiebre porcina clásica, empacadoras con una capacidad instalada disponible y capacidad de respuesta, además existen facilidades a la inversión extranjera, disposición y oportunidades para asociarse con empresas mexicanas exportadoras, sobreoferta de trabajadores calificados, buena respuesta de los productores locales hacia la apertura comercial, así como también posee infraestructura y personal calificado para la investigación sobre la industria alimentaria y un Acuerdo de Asociación Económica con Japón.

Sin embargo existen factores que afectan indiscutiblemente el desarrollo de esta industria, como lo son: las variaciones en los precios internacionales, los cambios bruscos en la demanda, la inflación e inestabilidad en las políticas financieras que afectan los costos, aumento en trabas y burocratismo, una creciente competencia debido a la apertura de mercados, también hay escasa información de mercados, apertura constante de los contenedores en los puntos de inspección instalados en las carreteras del estado, alto costo financiero para apoyar el crecimiento de las empresas, vinculación reducida entre centros de investigación, universidades y empresas y algo muy importante carece de un modelo estratégico de comercialización.

#### 2013



#### Mapa del clúster de la carne de cerdo en el Estado de Sonora



Por otro lado, se señala la importancia de fortalecer la estrategia de integración vertical, reuniendo un mayor número de granjas, para poder ampliar las plantas de sacrificio y proceso, con lo cual se garantizará contar siempre con materia prima y sobretodo se conseguirá disminuir los costos de producción y contrarrestar las fluctuaciones en los precios de mercado. Así mismo, es recomendable complementar la estrategia de eficiencia operativa con la búsqueda de una ventaja competitiva sustentable y basada en la innovación; así como la investigación de nuevos nichos de mercado, incluso podríamos sugerir que hay un abundante campo todavía por explorarse en lo que se refiere a la exportación de carne de cerdo al mercado japonés proveniente del Estado de Sonora, dado el alto potencial de crecimiento de

dicho producto, derivado de que las condiciones tanto sanitarias, de infraestructura y recursos son favorables, así como también de la puesta en marcha del Acuerdo de Asociación Económica entre México y Japón firmado en el 2004.

#### RECOMENDACIONES

Derivado de los hallazgos encontrados anteriormente surge la necesidad de desarrollar un modelo estratégico para la comercialización de carne de cerdo al mercado japonés, pero debido a que la competencia cada vez es más fuerte, este modelo debe estar basado fundamentalmente en algunas estrategias que se plantean a continuación: Promover en mayor grado las alianzas estratégicas tanto con empresas nacionales como extranjeras para aprovechar el conocimiento y la experiencia de las últimas. Promoción intensa de los productos mexicanos, haciendo énfasis en la calidad de la materia prima y en la variedad de los productos. Fomentar una política que contribuya a hacer más eficiente el proceso de inspección en los retenes. Buscar información en los centros de investigación y universidades para mejorar las técnicas de producción y de este modo hacer frente a la competencia global. Las investigaciones futuras pudieran enfocarse en mejorar las técnicas de producción e identificación de nichos alternativos de mercado, por ejemplo, el de la carne de cerdo orgánica; de esta forma se estaría en posibilidad de desarrollar ventajas competitivas para hacer frente a la competencia global. Establecer un proceso de integración vertical hacia atrás. Continuar observando rigurosamente las normas establecidas por el gobierno para evitar brotes de enfermedades porcinas y establecer la mejora continua en las medidas de seguridad. Establecer lazos a largo plazo con los clientes.

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# RESUMEN

Los cambios del uso de suelo y en el paisaje en la zona costera como resultado del crecimiento del turismo afectan la capacidad de los recursos naturales para proveer servicios ecosistémicos, poniendo en peligro la sustentabilidad del sistema global. Destacan los ecosistemas marinos y costeros como proveedores de servicios, especialmente sensibles a factores directos e indirectos promotores del cambio global como la modifición del hábitat, introducción de especies invasivas, sobreexplotación y cambio climático. La gestión apropiada ha sido un reto permanente debido a la complejidad de los ecosistemas marinos y costeros, las dificultades de gestión se agudizan por el crecimiento comercial, urbano y turístico en la costa. El crecimiento de los asentamientos humanos como consecuencia de los desarrollos inmobiliarios y megaproyectos de turismo han provocado cambios significativos de los ecosistemas marinos y costeros y requieren de atención prioritaria para mitigar los efectos antropogénicos. El estudio es una primera aproximación a la caracterización de la interacción entre turismo, ecosistemas costeros y su valor económico en Baja California Sur.

PALABRAS CLAVE: uso de suelo, servicios ecosistémicos, turismo, Baja California Sur.

# ECONOMIC ANALYSIS OF TOURISM AND IMPACTS ON COASTAL ECOSYSTEM SERVICES IN BAJA CALIFORNIA SUR.

## ABSTRACT

Changes in land use from coastal areas affects the ability of natural resources to provide ecosystem services, disturbing the sustainability of the global system. Marine and coastal ecosystems as major providers of services are especially sensitive to the direct and indirect promoters of global change, habitat modification, introduction of invasive species, over-exploitation and climate change. Management of coastal areas has been a challenge due to the complexity of the ecosystems; difficulties are exacerbated by business growth, urban and tourism in coastline. The expansion of human settlements as a result of housing development and tourism megaprojects has produced significant changes in environmental services and requires priority attention to mitigate anthropogenic effects. This study is a first approach to characterization of interaction between tourism, coastal and marine ecosystems and their value in Baja California Sur.

KEYWORDS: land use, ecosystem services, tourism, Baja California Sur.

JEP: L80, L83, Q57, R14, R52, Y91.

#### INTRODUCCION

El sector turístico es el de mayor impacto en el crecimiento económico en Baja California Sur (B.C.S.). Lo anterior provoca cambios profundos en el aprovechamiento de los servicios que proveen los ecosistemas costeros y marinos de la región. Los cambios se generan como resultado de los polos turísticos e inmobiliarios y la creciente urbanización que modifican el uso del suelo, el paisaje y los servicios ecosistémicos, ocasionado por la presión servicios de las zonas costeras.

La inversión extranjera directa es el motor del crecimiento del sector turístico, con poco más de 1,120 empresas que participan activamente en los mercados B.C.S., especialmente en los mercados laborales e inmobiliarios y servicios colaterales (hoteles, viajes y otros servicios recreativos, financieros, seguros y de alquiler), lo que se refleja es un dinámico sector de bienes raíces asociado al turismo. Lo anterior tiene importantes efectos socioeconómicos y ambientales en la zona costera por el cambio el uso del suelo, modificaciones en el paisaje costero y cambios en las actividades económicas tradicionales en los recursos naturales. En la regulación de los mercados de suelo destaca el tema de los derechos de propiedad. Derechos muchas veces no definidos sobre bienes públicos y con implicaciones importantes en el uso del los recursos por los diferentes actores involucrados (Urciaga, 2012).

## **REVISION DE LITERATURA**

Los servicios de los ecosistemas consisten en los beneficios sociales que otorga su funcionamiento y que frecuentemente se encuentran disponibles de manera gratuita para los beneficiarios directos (Kline, 2007), representan los beneficios directos e indirectos que la población humana deriva del funcionamiento de los ecosistemas (Costanza et al., 1997). Muchos de los servicios ecosistémicos tienen características de bienes públicos globales o locales y los mercados no se han estructurado para establecer mecanismos de asignación eficiente en función del sistema de precios.

Existen varias tipologías de servicios ecosistémicos todas ellas se orientan a establecer atributos que puedan ser claramente cuantificables para evitar su doble contabilidad. Se destacan atributos que se incorporen a la función de utilidad de los agentes que mejore su satisfacción o se incluyan como insumos o bienes intermedios en la función de producción de las empresas. Las diversas propuestas presentan algunos problemas. Daily (1997) definió claramente aquellos servicios que se derivan de las funciones y procesos de los ecosistemas que tienen relevancia desde la perspectiva ecológica, en contraste a la poca precisión de los servicios de soporte para el desarrollo cultural e intelectual. Una clasificación muy generalizada es la que emplea el reporte de La Evaluación de los Ecosistemas del Milenio (MEA, 2005), estudio que utiliza cuatro grandes grupos de los servicios ecosistémicos: de base, de aprovisionamiento, de regulación y culturales. Existen otros servicios ecosistémicos que se fundamentan en los valores pasivos y de no uso de los servicios ecológicos en que los derechos de propiedad y los mercados están indefinidos y se regulan con mecanismos alternativos al mercado como la reglas informales que establecen las comunidades sobre usos y costumbres (Hooper *et al.*, 2005).

## METODOLOGIA

Para analizar los cambios ocurridos en los servicios de los ecosistemas que provee el capital natural y su valoración económica, se utiliza un sistema de información geográfica (SIG) que permite cuantificar los cambios ocurridos en la zona costera a través del tiempo, para luego modelar su valor económico mediante información de precios del suelo y con ayuda de modelos econométricos. El SIG nos permite digitalizar el área de estudio a nivel estatal y de ciertas áreas de interés (Buceo recreativo-Isla de Espíritu Santo y Turismo de aventura en El Sargento La Ventana).

Para el nivel de La Península de B.C.S se utilizó la carta topográfica 1: 50,000 como mapa base, a través de la digitalización del contorno (O'Neill et al, 1996). A este mapa base se le adiciono la capa de la Serie III, Uso de suelo y tipo vegetación de <u>Instituto Nacional de Estadística y Geografía</u> (INEGI) 2002. Se utilizaron imágenes de satélite, para revisar que las unidades que obtenidas en la capa de la Serie III correspondieran a las que se podían visualizar en la imagen de satélite.

Se realizó una verificación bibliográfica de la información proporcionada por instituciones gubernamentales como: Comisión Nacional Forestal (CONAFOR), Instituto Nacional de Ecología (INE), INEGI, Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO), para supervisar que las unidades reportadas en la serie III correspondieran al tipo de vegetación y tipo de uso de suelo actual y proyectado para la zona. Se basó en la clasificación, en ecosistema, formación y tipo de vegetación y uso del suelo generado por CONAFOR y UMAFOR 303. Se utilizaron datos del Gobierno de Baja California Sur, contenidos en el documento público denominado Plan De Desarrollo Urbano, con la fnalidad de conocer como el Gobierno realizará el desarrollo de la zona costera y que areas se proyectan para uso, transormación y desarrollo.

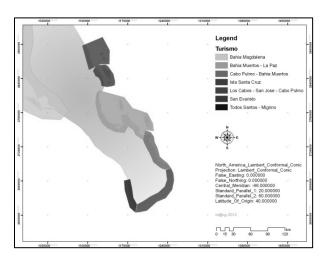
Para valorar económicamente los cambios en los servicios de los ecosistemas se recolectaron datos mediante encuestas a los actores y usuarios que incluyeron información sobre: lugar de origen, días de estancia en La Paz, costo del servicio, inclusiones en el servicio, número de sitios de buceo visitados, especies observadas en mayor cantidad, así como opinión acerca de la calidad del servicio. Se obtuvieron los promedios (±Desv. Est.) para los costos del servicio de buceo, , con el fin de observar si existieron diferencias en los ingresos dependiendo de la nacionalidad y los costos pagados dependiendo de la nacionalidad, se hicieron los análisis en el programa Evviews.

Para el caso de la valoración económica de los cambios ocurridos en la región El Sargento La Ventana por el turismo de aventura, se utilizaron los SIG ILWIS y ArcMap 9.2 para el reconocimiento en fotografías aéreas escala 1:75000 (Chuvieco, 1990) y planos catastrales. Además, se realizó la consulta con expertos pertenecientes al sector inmobiliario, de las cuales se obtuvieron los valores comerciales y especulativos de referencia. En las oficinas de Catastro Municipal se identificaron los valores oficiales del suelo, en materia de recaudación del impuesto predial, con ellos se realizaron los polígonos que permiten valorar económicamente los cambios ocurridos.

## RESULTADOS

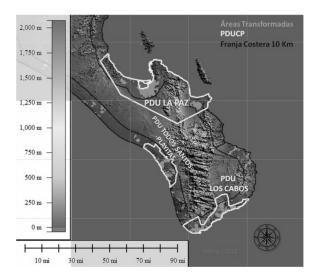
De la investigación realizada se obtuvo que el turismo atrae a Baja California Sur (B.C.S.) a poco más de dos millones de visitantes al año, con mayoría de visitantes extranjeros, registra una ocupación hotelera promedio cercana al 60%, una estancia media de tres días, con un componente estacional en el período de invierno y durante los torneos de pesca deportiva. La oferta hotelera se sitúa en poco más de 300 establecimientos de desarrollo hotelero que cuentan con poco más de 20 mil habitaciones de todas las categorías, además de los tiempos compartidos y 9 marinas que brindan resguardo al turismo náutico. La derrama económica anual del sector del turismo comporta alrededor de 60 mil millones de pesos. Se identificaron las zonas con mayor importancia turística en B.C.S. (Figura 1). Entre los cuales se destacan: Los Cabos, San José del Cabo, La Paz, Todos Santos, Buenavista, El Sargento y La Ventana, por ser las areas de mayor afluencia turística en B.C.S., los cambios en los servicios ecosistémicos de recreación y provisión ocurridos por el crecimiento del turismo.

Figura 1: Areas de mayor afluencia turística en B.C.S.



Zonas con mayor afluencia de turismo, realizado en base a los servicios ecosistémicos marinos y costeros. Fuente: María de los Ángeles Covarrubias, 2012.

Figura 2: Zonas impactadas por la actividad turística en el Estado de B.C.S.



Se trazo la franja costera de diez kilometros puesto que es el area con mayor interes para el desarrollo del turismo así como también es clave para el correcto funcionamiento de los ecosistemas costeros y marinos. Se muestran tambien las areas de mayor transformacion en el Estado y se identifican las regiones donde el PDUCP (Plan de Desarrollo Urbano Centro de Población) se realizará.Fuente: María de los Ángeles Covarrubias, 2012.

Los servicios ecosistémicos de mayor relevancia identificados en B.C.S. son: i) refugio de especies; ii) belleza escénica; iii) producción de alimentos; iv) recreación; v) culturales; y vi) recursos genéticos. Cada uno vinculado a funciones ecológicas y a usuarios específicos. Como lo es la actividad turística, que se basa en el uso y aprovechamiento de los ecosistemas costeros y marinos, generando un ingreso importante para el Estado, sin embargo el impacto de dicha actividad tiene efectos irreversibes en el sistema costero, causando la transformacion de areas claves para el adecuado funcionamiendo de los ecosistemas (Figura 2).

Para la franja costera del municipio de La Paz (Figura 3), se tiene contemplado una superficie de 464,728 hectáreas las cuales representa el 78 % y para el municipio de Los Cabos contempla una superficie de

134,304 hectáreas que representa el 22 % respectivamente, en total se tiene que para los dos municipios se tiene comprendida una superfície de 599,031.30 hectáreas (Tabla 1).

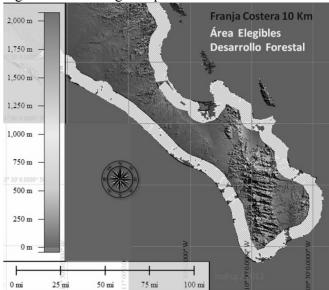


Figura 3: Áreas elegibles para el desarrollo

Franja de diez kilómetros de mayor atracción para el turismo, debido a la importancia los servicios ecosistémicos presentes, dentro de los que destaca el servicio de recreación y cultural. Destacando que mayor amenaza presenta. Fuente: María de los Ángeles Covarrubias, 2012.

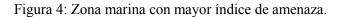
Lo anterior parcialmente explica el rápido crecimiento del mercado inmobiliario y el incremento de asentamientos turísticos, provocando cambios en servicios que proveen los ecosistemas presentes.

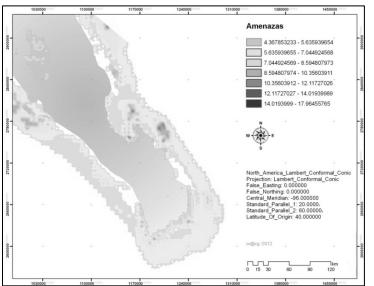
NOM_MPIO	AREA	HECTAREAS	HA.	%
	23,790.126	2.38		
	8,852,091.586	885.21	464.728	78
La Paz	2,221,601,368.868	222,160.14	404,728	/0
	2,416,799,177.487	241,679.92		
	1,343,026,922.208	134,302.69		
Los Cabos	6,794.362	0.68	134,304	22
	2,836.017	0.28		
	Total	599,031.30	599031	100

Tabla 1: Áreas elegibles de Desarrollo Forestal, para B.C.S. en el 2012.

En esta tabla se presentan el área a desarrollar para B.C.S que comprende la franja costera de 10 km. Fuente: María de los Ángeles Covarrubias, 2012.

El crecimiento en la inversión turística, afecta infraestructura y equipamiento trae problemas para B.C.S, ya que repercute en el correcto uso de los servicios ecosistémicos brindados por la región. El incremento turístico provoca un incremento en la demanda de bienes y servicios ecosistémicos marinos, provocando amenazas para los hábitats de las principales especies. Entre las acciones que generan las principales amenazas se encuentran sobre-explotación de los recursos pesqueros, puesto que la falta de esquemas que guíen al uso, gestión y aprovechamiento sustentable ha causado amenazas en las especies presentes en el litoral (Figura 4). Esto ha provocado que los sitos de crianza de especies marinas y el número de las especies disminuya, afectando su ciclo de vida y por ende el ciclo del servicio brindado.





Se presenta el área marina más afectada a causa del turismo y el uso no sustentable del servicio ecosistémicos Fuente: María de los Ángeles Covarrubias, 2012.

# <u>Servicios Ecosistémicos Y Su Valor Económico Complejo Insular Espíritu Santo, B.C.S.</u> México: El <u>Buceo Recreativo En Caso De Estudio.</u>

El costo total que los turistas pagaron en esta zona por los servicios de buceo en el complejo insular Espíritu Santo el promedio fue de \$2,440.00 (dos mil cuatrocientos cuarenta pesos 00/100 M.N.) ( $\pm$ \$3057.44), el costo mínimo correspondió a \$1,500.00, mientras que el máximo fue de \$11,543.00. Los visitantes que pagaron entre \$1,500.00 a \$2,000.00 (mil quinientos a dos mil pesos 00/100 M.N) por el servicio de buceo fue de un 40%, un 22% pagaron entre \$2,001.00 y \$3,000.00 (dos mil uno y tres mil pesos 00/100) y el resto pagaron de entre \$3,001.00 a \$11,000.00 (tres mil uno y once mil pesos 00/100) por el servicio. Así mismo dependiendo de la nacionalidad de origen varió el costo promedio que los turistas pagaron por los servicios de buceo, los turistas europeos fueron los que pagaron más por los servicios de buceo con un costo de \$9,316.00 (nueve mil trescientos diez y seis pesos 00/100 M.N.;  $\pm$  \$1,996.00), seguido de los turistas de otras nacionalidades que pagaron \$5,724.00 M.N. (cinco mil setecientos veinticuatro pesos 00/100 M.N.;  $\pm$  \$1,600.00), los mexicanos, estadounidenses y canadienses pagaron entre \$2,000.00 (dos mil pesos 00/100 M.N.) y \$2,700.00 (dos mil setecientos pesos 00/100 M.N.) por los servicios de buceo.

#### Cambios En Uso Del Suelo Por El Turismo De Aventura En El Sargento Y La Ventana, B.C.S.

Es posible presentar una aproximación al valor económico de los cambios ocurridos en El Sargento La Ventana por el turismo de aventura. Primero se identifican los distintos usos de suelo ya que la demanda del mercado inmobiliario y el intercambio de los derechos de propiedad sobre los predios va de la mano con las modificaciones en los servicios ecosistémicos del turismo y recreación, generando una proyección de crecimiento basada en el mercado mencionado (Figura 5). Las áreas prioritarias para el desarrollo son de tipo: residencial turístico, proyección comercial, uso turístico, campestre residencial, recreación y áreas verdes ocupando un 55.5% del total del ejido. Un 39% de las tierras de uso común, las cuales no tienen hasta el momento del análisis, alguna proyección determinada y el resto se distribuye entre vivienda/comunidad, comercio/servicios y zona agrícola.



Figura 5: Expectativas de crecimiento en El Sargento y La Ventana.

Se presentan la ubicación de los predios en la región y el destino para cada uno de ellos Fuente: Claudia Lauterio, 2011.

# Valor Económico Del Suelo En El Sargento Y La Ventana, B.C.S.

UTM 12 Norte Elipsoide WGS

Residencial Turístico Comercio y servicios Vicienda/comunidad

Campestre residencial

Proyección comercial

Recreación, areas de reser Uso turistico

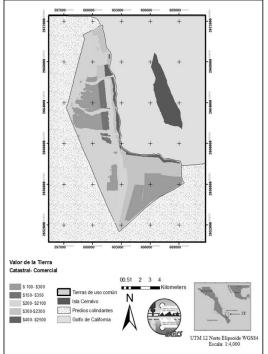
No ejidal Zona Agricola Isla Cerralvo

Predios colindantes

Golfo de California

El valor comercial para este análisis es el más importante, ya que identifica cuales son los predios en la región de estudio de mayor interés para el mercado turístico, representados por aquellos predios con acceso a playa.Obteniendo que de un 80% de dichos predios cuyo principal destino es para uso turístico (residencial y hotelero) el 35% se estima en un precio de \$2,500 pesos m<sup>2</sup>, considerando su cercanía al mar, el acceso a los servicios y urbanización. En cuanto aquellos predios orientados al sector servicios y comercial los cuales representan un 25 %, se estiman en un valor de \$2,300 pesos m<sup>2</sup>, valor que se basa en el desarrollo y crecimiento del sector servicios (restaurantes, comercios, tiendas) para la región.

El resto de los predios, representado por el 40% está orientado al uso residencial turístico sin frente de playa y ausencia de servicios valuados en un rango de 2000 a 100 pesos. Sin embargo, la ausencia de regulación en el mercado inmobiliario carece de una evaluación previa que certifique el precio real, considerando las variables ambientales y sociales existentes, por parte de se reconoce también el comportamiento de los ejidatarios al no considerar estos precios, intercambiando predios por otro tipo de bienes, causando así cambios en el ordenamiento y transferencia de los predios.



#### Figura 6: Valoración económica de la zona de estudio

La figura identifica la valoración otorgada a cada uno de los predios con respecto a su cercanía al mar y acceso a los servicios.

### CONCLUSION

En México y en el caso particular de Baja California Sur, el turismo masivo se articula a modo de una red cuyo vértice lo ocupan algunas localidades de su territorio ligadas, preferentemente con el extranjero.Entre las acciones que generan las principales amenazas se encuentran la sobreexplotación de los recursos naturales, el deterioro ambiental y la falta de esquemas que guíen el uso, gestión y aprovechamiento sustentable de los servicios de los ecosistemas. Es frecuente que los servicios ecosistémicos y el paisajes costeros se degraden como resultado de establecer obras de infraestructura turística y asentamientos humanos en playas, dunas, esteros y lagunas costeras. Por ello, el uso intensivo de los ecosistemas costeras y marinos por el turismo no se puede explotar sin control dado el evidente nivel actual de degradación de los servicios ecosistémicos.

El desarrollo futuro de la actividad turística está condicionado a la aplicación de criterios de desarrollo sustentable y especialmente de planificación económica con instrumentos de planes de desarrollo urbano y de ordenamiento ecológico marino y terrestre. Aprovechar responsablemente la demanda turística actual que valora de manera importante el patrimonio natural y cultural implica no degradar los servicios ecosistémicos. Esta perspectiva incorpora nuevas áreas de oportunidad para desarrollar la empresa dedicada al turismo de naturaleza, oportunidades complementarias que pueden mejorar la cohesión social. Existen muchas actividades de turismo responsable como la observación de ecosistemas, ballenas, tortugas, aves, observación geológica y de fósiles, entre otras, actividades de mínimo impacto sobre el ambiente una vez que se establece su uso ordenado y se siguen las indicaciones derivadas de los Programas de Manejo respectivos.

El complejo insular Espíritu Santo es uno de los principales atractivos turísticos de La Bahía de La Paz, siendo esta isla visitada para un sinfín de actividades tal como se mencionó en los antecedentes y de esta manera deberían de existir esfuerzos enfocados a integrar la información de estudios sociales como el

presente con estudios biológicos que ya se realizan de manera consistente en las islas. Esta isla trae recursos a una parte importante de las empresas turísticas de buceo de la bahía en los meses de temporada alta que son los meses de junio a septiembre en donde las condiciones climatológicas permiten la actividad del buceo recreativo, sin embargo, las demás actividades como el kayakismo y la pesca son de importancia relevante en otras épocas del año; así mismo las actividades de caminata y camping se pueden realizar los demás meses del año en los cuales no hay otras actividades debido a las condiciones climatológicas. El Sargento y La Ventana demuestran que el desarrollo inmobiliario es el sector más dinámico en la región. La construcción de casas habitación de tipo especulativo "spec house" son habitadas durante la temporada invernal y originan problemas en lo que respecta al uso y goce de la propiedad, así como en el ámbito legal, afectando el estatus de tenencia de la tierra, lo cual genera efectos negativos en el sector social, por la intervención del régimen ejidal y la figura legal de propiedad para el caso de extranjeros. Las características naturales de la zona, la ausencia de regulación en el uso de suelo, aunado a la popularidad que adquieren las actividades turísticas, atraen constantemente a un elevado número de turistas, brindándoles comodidad y servicios suficientes para establecerse en la zona como un lugar de segunda residencia. Dicho fenómeno ha promovido el crecimiento turístico desde 1993 a la fecha, como consecuencia de la reforma de 1992 al artículo 27 Constitucional, en donde por primera vez se otorgó el dominio pleno a los ejidos en las áreas de uso común.

Los resultados de ésta reforma para El Sargento y La Ventana en particular han sido interesantes ya que continúa incrementándose el uso de suelo para fines turísticos, motivado principalmente a causa del auge del mercado inmobiliario, resultado de los mecanismos de incorporación de suelo ejidal al desarrollo, en los cuales participan los sectores no populares de la población. En todos los casos, resulta notoria la poca participación de las instituciones públicas y gubernamentales en el desarrollo urbano, obteniendo así el predominio del libre mercado del suelo en el cual los gobiernos municipales son facilitadores.

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#### RECONOCIMIENTO

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# INTERACCIÓN EN EL SISTEMA REGIONAL DE INNOVACIÓN: ESTUDIO EMPÍRICO DE LA COLABORACIÓN Y COOPERACIÓN PARA LA INNOVACIÓN EN EL CONTEXTO DE REGIÓN LAGUNERA DE COAHUILA

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#### RESUMEN

Los estudios regionales de la innovación realizados por la OCDE y BID en el contexto de América Latina, permiten sustentar la necesidad de la medición de la dinámica de la innovación como proceso interactivo, como fenómeno complejo y sistémico, que implica medir, además de los insumos y resultados, las relaciones de colaboración y cooperación entre los agentes de los Sistemas Regionales de Innovación (SRI). El objetivo del trabajo es describir las actividades de innovación, las interacciones de colaboración y de cooperación que se dan dentro del SRI, a nivel de Región Lagunera de Coahuila, en Micro, Pequeñas y Medianas Empresas (PYME). La indagación empírica se realizó mediante entrevista estructurada, con una muestra aleatoria de 114 unidades, con un error inferior a  $\pm$  5 puntos y un nivel de confianza del 95%. El procesamiento fue con estadísticos descriptivos y contrastaciones no paramétricas utilizando SPSS. Resultados: Identificación de las actividades de innovación en diferentes modalidades; análisis de los esfuerzos y capacidades de las MIPYME para gestionar la innovación; caracterización de la colaboración y cooperación, que resultó ser mayor con agentes de la cadenas industriales, a pesar de los requerimientos externos, tecnológicos y financieros, de las MIPYME para la innovación.

PALABRAS CLAVE: innovación, Sistema Regional de Innovación, colaboración y cooperación.

# INTERACTIONWITHIN AREGIONAL INNOVATION SYSTEM: EMPIRICAL STUDY OFINNOVATION, COLLABORATION ANDCOOPERATION IN THE CONTEXTOFTHE LAGUNA REGIONOF COAHUILA

#### ABSTRACT

Regional studies of innovation undertaken by the OECD and IDB in the Latin American context, substantiate the need for measuring the dynamics of innovation as an interactive process, as a complex and systemic phenomenon, which involves measuring, additionally to inputs and results, partnerships and cooperation between staff of Regional Innovation Systems (NIS). The objective of this project is to describe the activities of innovation, collaborative interactions and cooperation that occur within the SRI, Laguna district level of Coahuila, in Micro, Small and Medium Enterprises (SMEs). The empirical research was conducted through structured interviews with a random sample of 114 units, with an error of less than  $\pm$  5 points and a confidence level of 95%. The information processing was done through descriptive statistics and nonparametric contrasting using SPSS. Results: Identification of innovation; activities in different ways, analysis of efforts and capacities of MSMEs to manage innovation;

collaborative characterization and cooperation, which was stronger with agents of the industrial chains, despite technological and financial external requirements, of MSMEs for innovation.

KEYWORDS: Innovation, Regional System of Innovation, collaboration and cooperation.

## INTRODUCCIÓN

La innovación como factor estratégico de la competitividad en el tránsito a la sociedad del conocimiento, está estrechamente ligada al territorio y al ámbito local. El concepto de sistema regional de innovación (SRI), es una aproximación teórica relativamente nueva en el ámbito del desarrollo regional, que tiene sus antecedentes, a fines de los años ochenta y principios de los noventa del siglo pasado, en los trabajos que consideraban el concepto de sistema de innovación como el núcleo de los mecanismos de desarrollo económico, asociados a la corriente estructuralista-evolucionista de la doctrina económica, que rompían con la visión neoclásica de la economía.

La importancia de los estudios de innovación desde la dimensión regional, radica en que "dicho concepto se basa en la idea de que el proceso de innovación y el aprendizaje son eminentemente social, dado que implica interacción de las empresas, las agencias de promoción de la innovación, y las instituciones académicas y los centros de investigación" (Llisterri, J, et al, 2011). Es decir la región es un sistema dinámico de actores que interactúan entre sí.

Si a ello agregamos, que en México las mediciones de la innovación se han realizado, a través de las encuestas nacionales (2002, 2006 y 2012), que no reflejan la problemática regional, y que los indicadores utilizados en su mayoría responde al enfoque planteado en el Manual de Oslo (OCDE, 1999,2005) orientado a indicadores de input y output intermedios a nivel macro. Trabajos empíricos realizados en México, sobre la vinculación academia en el sector industrial (Torres, 2009); el análisis estratégico del desarrollo de las MIPYME a nivel nacional y estatal (FAEDPYME, 2009, Medina et al, 2011), la cooperación interempresarial de las PYME a nivel sectorial (Araiza, Z; Velarde , E y Zarate, A. (2010) muestran por un lado que las relaciones entre las empresas y los actores sociales está relacionada con la intensidad de la actividad innovadora y el tamaño de las empresas; y por otro constatan que son las PYME las que presentan más necesidad de aprovechar las potencialidades externas.

Los aspectos indagados no profundizan sobre los vínculos en cuanto a las diferentes modalidades de la colaboración y cooperación, y su reflejo en la complementariedad científica y tecnológica existente en los proyectos concertados entre los agentes de los sistemas de innovación a nivel regional (estados y municipios) Lo expuesto justifica la necesidad de la investigación orientada a caracterizar el SRI de Coahuila y la colaboración y cooperación que genera, por su incidencia a través de la innovación en los resultados económicos, en la que se enmarca el presente trabajo. Su objetivo es describir las actividades de innovación, las interacciones de colaboración y de cooperación que se dan dentro del SRI, a nivel de Región Lagunera de Coahuila, en Micro, Pequeñas y Medianas Empresas (MIPYME). Los resultados ofrecerán una información valiosa para las políticas empresariales y estatales de innovación en el Estado.

El desarrollo del trabajo se estructura en tres partes: referentes teórico –metodológicos mediante la revisión de la literatura, la metodología utilizada en el estudio empírico, y el análisis de los resultados en cuanto a tipología, esfuerzos, capacidades, colaboración y cooperación en la gestión de la innovación, en las MIPYME de la Región Lagunera, como uno de los componentes del SRI de Coahuila.

# **REVISIÓN DE LITERATURA**

Como hemos expresado en trabajos anteriores, el concepto de innovación ha tenido su evolución desde el enfoque empresario individual, pasando por su asociación a la Investigación y Desarrollo (I&D), hasta el

enfoque de sistema (Armenteros, et al, 2012 b). Como apunta M. Albornoz (2009) es un concepto polisémico, amplio, pero en el campo de las políticas públicas "entraña el propósito de mejorar la posición competitiva de las empresas, mediante la incorporación de nuevas tecnologías y conocimientos de distinto tipo. El proceso de innovación consiste así en una serie de actividades no solamente científicas y tecnológicas, sino también organizacionales, financieras y comerciales; acciones que, en potencia, transforman las fases productiva y comercial de las empresas".

"Los sistemas de innovación pueden ser considerados como conjuntos de diferentes instituciones y actores sociales que, tanto por acción individual como por sus interrelaciones, contribuyen a la creación, desarrollo y difusión de las nuevas prácticas productivas. Este concepto concibe a las innovaciones como un proceso social e interactivo en el marco de un entorno social especifico y sistémico" (Albornoz, 2009). Es decir, la región es un sistema dinámico de actores que interactúan entre sí promoviendo la innovación como fuente generadora de la competitividad.

Realmente, al decir de Albornoz (2009), los elementos del SIR pueden articularse como círculos virtuosos que promueven procesos de aprendizaje e innovación, o configurar círculos viciosos que tienen la capacidad de bloquear el proceso de innovación. De ahí, se genera una interrogante general para la investigación: ¿En el Estado de Coahuila se ha creado una capacidad innovadora resultado de la interacción virtuosa de los actores que conforman el SRI?Existen diversos enfoques y tipología para el estudio de los SRI y no consenso en cuanto a los componentes clave. Los estudios sobre las tipologías de los SRI han sido criticados por el énfasis en la identificación de los componentes principales de los sistemas de innovación, lo cual pone de manifiesto, según Edquist (2001), problemas en el conocimiento real de los determinantes, dificultades para definir en términos cuantitativos algunos procesos de aprendizaje, lagunas teóricas sobre el papel del estado, poco rigor académico en algunas de las variables seleccionadas, entre otras. Teniendo en cuenta que el propósito es medir la colaboración y cooperación para la innovación, se asume la teoría de los sistemas de innovación - basada en un concepto holístico—que plantea la creación de sinergias debido a la interacción entre sus agentes, que, a su vez, generan un proceso de aprendizaje colectivo, y la cooperación aparece como uno de sus mecanismos.

El nivel de desarrollo del SRI en los países en desarrollo, entre los que incluye a los latinoamericanos, que según Albuquerque (2002) son inmaduros, caracterizados por una infraestructura científica relativamente poco desarrollada, empresas autóctonas sin actividad tecnológica significativa, una participación importante de las empresas transnacionales en sectores clave de la economía y, por último, un fuerte desequilibrio en la localización de los recursos económicos y tecnológicos. Un antecedente importante de la investigación, por su relevancia para el continente de América Latina son los estudios realizados por el Banco de Desarrollo Interamericano (BID) a partir de las funciones y agentes relevantes de los SRI. A los efectos de la investigación que se presenta, resulta importante la afirmación de Llisterri et al (2011), al reconocer en la literatura que los factores de interacción entre los agentes en los SRI constituyen uno de los factores principales para impulsar la innovación dada la creación de sinergias creada en la interacción de los actores.

Aun cuando el estudio de la cooperación y sus efectos no ha sido objeto de investigación muy difundido, es preciso mencionar como antecedentes: la innovación reconocida como una actividad de cooperación realizada en colaboración con otras empresas, universidades o centros de investigación y desarrollo (Tomlinson, 2000); las propuestas de indicadores para medir las interacciones dentro de los sistemas regionales y clúster (Tsipouri (2000); las evaluaciones sobre políticas de fomento a la cooperación innovadora con apoyo públicos y en innovaciones tecnológicas, sobre todo España (Heijs 2001, 2002, 2004 a,b; Barañano 2003, 2006).

En los estudios realizados de interacción dentro de los SRI, se distingue la identificación de las modalidades de colaboración y cooperación y sus dos tipologías: con agentes de la cadena productiva o

las fuerzas competitivas del sector industrial (vertical) y con agentes de las estructuras científicas y tecnológicas y de gobierno (institucional). (Buesa et al, 2003; Heijs et al, 2004a; Surroca & Santamaria, 2006). Para cada uno de ellos el fines diferentes mientras la alianza horizontal está vinculada de manera directa a la posición en el mercado, economías de escala; la alianza vertical genera complementariedad científica-tecnológica, coste – financiación y fuentes alternativas de financiamiento a la innovación. A los efectos de la investigación utilizaremos la colaboración y cooperación como dos niveles diferentes de intensidad de las interacciones.

El SRI de Coahuila está agrupado junto con 12 estados que representan el 43 % a nivel federal, dentro de una misma tipología, lo que nos permitiría decir que representa la media del país, que se caracteriza por presentar una alta especialización industrial caracterizada por el predominio de la manufactura de bajo contenido tecnológico, un bajo peso del sector servicios en su estructura productiva y una infraestructura de ciencia y tecnología comparativamente débil. Excluyendo el DF que resulta una aglomeración por si misma, dada la gran concentración de empresas de alta tecnología del país, alta densidad de población y de empresas por unidad de territorio y una fuerte infraestructura de ciencia y tecnología es el clúster integrado por los estados de Baja California, Chihuahua, Morelos y Tamaulipas, el que presenta una mejor situación con respecto al caso de estudio, por el elevado porcentaje de empresas de alta tecnología y una alta proporción de empresas de tamaño medio y grande. Crespi, G. y D'Este, P. (2011).

# METODOLOGÍA

La metodología de la investigación utilizada consiste en una revisión documental presentada en la revisión de la literatura. La selección de la muestra se fundamenta en el muestreo estratificado, los criterios de tamaño según la cantidad empleados y el sector. Dentro de cada sector se utilizó el muestreo aleatorio simple. En el presente estudio el procedimiento en la afijación final no fue proporcional por lo que se utilizaron factores de elevación para la obtención de los datos agregados. Del total de la muestra de 114 MIPYME, se tomaron 54 (50,9%), todas ellas clasificadas como innovadoras, que será la submuestra sometida a estudio dado el objetivo específico de describir las características de la innovación y las interacciones mediante colaboración y cooperación de la actividad innovadora y sus efectos en los resultados empresariales.en esta investigación. El método utilizado fue de entrevistas estructuradas, mediante la utilización de dos instrumentos:, ambos validados en investigaciones precedentes, fueron: Encuesta de Análisis del Desarrollo

Estratégico de las MIPYME 2012, Bloque IV y el cuestionario sobre colaboración y cooperación en torno a los proyectos de I+D, del Instituto Análisis Industrial y Financiero (IAIF/FECYT) de la Universidad Complutense de Madrid (Heijs et al, 2004b). Las entrevistas se realizaron de julio a octubre del 2012. El procesamiento fue con estadígrafos descriptivos y contrastaciones, utilizando SPSS. Para la contrastación de variables cualitativas mediante estadística no paramétrica, se siguieron los siguientes pasos: plantear hipótesis, establecer nivel de significancia, seleccionar como estadígrafo la prueba H de Kruskal-Wallis, calcular e interpretar el valor obtenido.

# **RESULTADOS Y DISCUSIÓN**

#### Comportamiento De La Innovación

Dentro de las MIPYME innovadoras, la innovación se comporta en cuanto a la modalidad (tipo de innovación según resultados) y la importancia asignada, de la siguiente forma: Predominan las innovaciones en productos según las frecuencias, con 92,5 % en cambios y mejoras, y 66% en comercialización de nuevos productos. Concuerda con que el 53,7% declaran que lanzan un nuevo o mejorado producto en menos de un año y el 24,1% entre 2 y 3 años. La baja de la comercialización de nuevos productos podría estar asociado a la baja actividad e inversiones en desarrollo tecnológico (16,7%

no realizan y 66,7% por debajo del 10% de las ventas) e innovación (22.2 % no realizan y 55.6% por debajo del 10% de las ventas). Sin embargo según la media la importancia en una escala Likert es 2,78 y 2,69 las dos modalidades de innovación de productos.

Las innovaciones en cambio y mejora de procesos y adquisiciones de nuevos equipos tienen un 84,9%, lo cual puede ser explicado por el enfoque a las operaciones en particular en micro y pequeñas y por las exigencias de la certificación de calidad sobre todo en el sector industrial, aunque es un área de oportunidad ya que el 61,1% no tiene ningún tipo de certificación. Llama la atención que el 57,4% declaran que introducen nuevo o mejorado proceso en menos de un año y el 27,8 % entre 2 y 3 años. Las innovaciones del sistema de gestión tienen los valores más bajos, por cambio o mejoras en dirección y gestión (54.7%), en compras y aprovisionamiento (54,7%) y en comercio y ventas (67,9%). Según la media de la importancia en una escala Likert la innovación en gestión tiene valores similares a los restantes modalidades con 271, 2,68 y 2,73.

Tabla No. 3: Los Tipos De Innovacion Tienen Diferencias Significativas Según El Tamaño De Las Empresas

Resultados Innovadores	Chi-Cuadrado	Gl	Sig. Asintót.
Mejoras En Productos/Servicios	,009	2	,996
Comercialización De Nuevos Productos /Servicios	2,723	2	,256
Mejoras En Los Procesos De Producción/Servicios	1,856	2	,395
Adquisicion De Nuevos Bienes Y Equipos	3,833	2	,147
Mejoras En Dirección Y Gestión	8,364	2	,015**
Mejoras En Compras Y Aprovisionamientos	7,328	2	,026**
Mejoras En Comercial /Ventas	3,550	2	,170

Nivel De Significación 0.01 \*\*\*0.05 \*\*0.1\* No existen diferencias significativas entre el nivel de innovación según el tamaño de las empresas, excepto en mejoras y compras y aprovisionamiento que puede estar relacionada con su volumen; y en las mejoras de la dirección y gestión que es más característico de empresas de mayor tamaño y de mayor antigüedad.

#### Interacciones De Apoyo A La Innovación.

Con respecto a las alianzas o acuerdos con las fuerzas competitivas del mercado o en otros términos con los agentes del sector (colaboración vertical), se manifiesta por un lado: que en los dos últimos dos año (2011-2012) se han establecido alianzas o acuerdos de colaboración con otras empresas en diversas áreas: comercialización 59.3%, compras y abastecimientos 46,3%, logística 51,9% y en menores niveles, la producción y la Investigación y Desarrollo (I+D) en un 33,3%. Por otro lado, con respecto a la colaboración para el desarrollo tecnológico e innovación, obtiene valores altos con clientes en un 59,3%, con proveedores en 42,6%, competidores intersectoriales 48,2% e intersectoriales 30,2%. Si al alto % de colaboración del cliente, agregamos que estos participan en un 44,5% con sus ideas sobre todo al inicio y durante los proyectos de innovación de productos, se corrobora que la relación con el cliente es un motor del proceso de innovación; es decir, la proximidad y conocimiento del cliente son factores claves en la innovación de las PYME (Barañano, 2003). El SRI además de la colaboración vertical, comprende la colaboración institucional con agentes sociales, sobre todo instituciones públicas y/o privadas vinculadas a la actividad de I +D y que pueden contribuir a la complementariedad científico y tecnológica que requiere la innovación en las empresas val costo-financiación, así como instancias de gobierno, sobre todo en cuanto al financiamiento. Los datos muestran que las interacciones a través de las diferentes modalidades de la adquisición y transferencia de conocimientos entre las empresas y los agentes sociales del SRI, tiene un nivel bajo-medio en la región.

*Análisis mediante contrastaciones de variables:* En este apartado nos interesa determinar en primer lugar si la colaboración y la cooperación tienen efectos sobre los resultados de innovación de las empresas, y al mismo tiempo si el comportamiento de los diferentes tipos de innovación tiene efecto sobre los resultados empresariales. Asumimos las posturas de Surroca Aguilar et al (2006) de que las empresas innovadoras

obtienen resultados empresariales superiores; y que la capacidad de colaborar y cooperar influyen de manera directa en las innovaciones, pero de manera indirecta en los resultados empresariales. Lo cual puede explicar porque aun los empresarios no le otorgan importancia práctica alas colaboración y cooperación. La contrastación de variables se realizo a través de la Prueba de Kruskal-Wallis en las siguientes hipótesis:

H1 La colaboración y cooperación vertical tiene un efecto positivo sobre los resultados innovadores.

H2 La colaboración y cooperación institucional tiene un efecto positivo sobre los resultados innovadores.

H3 Los resultados innovadores de las empresas tienen un efecto positivo sobre los resultados económicos empresariales.

#### CONCLUSIONES

Primero. Las MIPYME innovadoras por sus resultados de la región Lagunera de Coahuila tienen un lento dinamismo en el proceso de innovación medido por la frecuencia de lanzamiento de nuevos productos y procesos, el bajo alcance de novedad, los pocos proyectos de innovación, la no planeación de acciones de innovación, lo permite inferir que la innovación es esporádica y no una actividad sistemática, lo cual provoca resultados efímeros que no aseguran la competitividad sostenible.

Segundo. En los proyectos desarrollados, las interacciones con agentes del entorno se orientan hacia las llamadas fuerzas competitivas del sector industrial como competidores y clientes y es casi ausente la colaboración y la cooperación institucional con gobierno y sobre todo, con las universidades y centros de investigación. En el caso de las universidades se puede explicar por el alcance o nivel de novedad la innovación, el origen aislado y no planeado de la misma, donde no se requiere de complementos en conocimientos científicos ni tecnológicos. Sin embargo, los datos, información y el conocimiento está distribuidos en diferentes áreas funcionales de la organización, por lo que se requiere para el éxito la gestión de los proyectos de innovación que se desarrolle, la comunicación fluida y la integración al menos entre investigación y desarrollo, ingeniería, calidad, producción, marketing y finanzas (Morcillo Ortega, P., 1997; Nieto, 2003, Barañano 2003), como sustento para la propuesta de alternativas para la toma de decisiones, así como la alineación a los objetivos estratégicos.

Tercero. Se confirma que a pesar de que en el contexto mexicano y en particular en el sistema regional de innovación de Coahuila son escasas las interacciones entre agentes, en el caso de las empresas que tienen formalizadas o realizan actividades de I+D+i, se da colaboración en torno a los proyectos de investigación e innovación con universidades o con gobierno en busca de apoyo financiero. Es preciso resaltar que los proyectos de la innovación, independientemente de su carácter tecnológico o no tecnológico, influyen progresivamente en la creación de un autentico cambio hacia la cultura innovativa empresarial, basada en la confianza, colaboración, alineación, integración, alianzas, compromiso, trabajo en grupo y proyectos cooperados. De ahí, que la medición precise diferenciar la colaboración y cooperación a través de los tipos de proyectos contratados o cooperados.

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# RESUMEN

El sector turístico a nivel mundial ha tenido un comportamiento creciente en movilidad de turistas. En México también se ha observado un patrón similar, pero con algunas disminuciones de afluencia turística por factores externos económicos y de salud pública. El objetivo de este trabajo fue analizar los principales factores del turismo en México así como identificar las causas que han motivado ciertas tendencias a la baja. Los resultados permitieron encontrar la aportación que tiene el este sector para atraer turistas, generar empleos y de incrementar el gasto del turista.

PALABRAS CLAVE: Turismo, desarrollo y gasto.

# TOURISM OUTLOOK: MEXICO CASE

# ABSTRACT

The global tourism industry has been growing in mobility behavior of tourists. Mexico also has seen a similar pattern, but with some tourist inflow decreases by external economic factors and public health. The aim of this study was to analyze the main factors of tourism in Mexico and to identify the causes that have led to some downward trends. The results allowed to see the contribution that this sector is to attract tourists, create jobs and increase tourist spending.

**JEL:** O11, O14, O44, O50.

**KEYWORDS:** Tourism, development and spending.

# INTRODUCCIÓN

Gracias a la diversidad de oferta turística en México, le ha permitido consolidarse con el transcurso de los años, pues ha tenido la oportunidad de emplear diferentes espacios y entornos que lo hacen atractivo. Entre la diversidad de espacios y entornos podemos encontrar diferentes prácticas de turismo, como el turismo de sol y playa donde sobresalen destinos como Cancún, Los Cabos, Puerto Vallarta, Nayarit, Acapulco, entre otros; el turismo arqueológico, ampliamente sobresaliente al sureste y en regiones al interior del país. También, existe el turismo cultural donde los visitantes pueden apreciar desde espacios coloniales hasta contemporáneos; el turismo alternativo y que Estados como Veracruz, Chiapas y Baja California Sur han adoptado en sus actividades turísticas (Benseny, 2007).

Desde luego hay que mencionar al turismo de cruceros, que en los últimos años se ha fortalecido debido a la promoción de la Secretaría de Turismo (SECTUR) e instancias de gobierno local. También hemos visto otro tipo de prácticas de turismo como el de negocios, deportivo, de salud, ecoturismo que han sido promovidas y más adelante comentaremos. Para la SECTUR desde hace dos décadas, el sector se ha consolidado como una de las fuentes generadoras de divisas de México, un sector que aporta más del 8.0% al Producto Interno Bruto (PIB). Además ha sido una fuente importante de financiamiento del déficit de cuenta corriente de la economía mexicana, pues en varios periodos su saldo en la Balanza Turística ha sido positivo (SECTUR, 2001). Con lo antes expuesto, el objetivo de este trabajo fue analizar

los principales factores del turismo en México así como identificar las causas que han motivado ciertas tendencias a la baja. Eso permitirá reconocer las oportunidades y fortalezas del sector, y así enfocar un políticas públicas que motiven su desarrollo.

## **REVISIÓN DE LITERATURA**

Todo este avance del sector turístico en México se llega a fortalecer más desde la década de 1970, cuando se elabora el primer Plan Nacional de Desarrollo Turístico en consecuencia para poder subsanar las deficiencias en materia económica que tenía el país (Benseny, 2007). Recordemos que la industria mexicana en su momento no tenía la fortaleza para poder competir con exportaciones de bienes. De tal manera que había que buscar la forma de reactivar la economía mexicana con otras actividades productivas poco utilizadas entre ellas, el turismo. A esto se le incorporó la participación del Fondo Nacional de Fomento al Turismo (FONATUR) al identificar y desarrollar los Centros Integralmente Planeados (CIP) y permitir que algunos destinos turísticos se desarrollaran.

Este plan consistía en propiciar la inversión promoviendo la inversión, a partir de planes maestros y donde los inversionistas y desarrolladores cuenten con espacios y lotes para la edificación de sus hoteles, condominios, villas, residencias, por mencionar algunos (FONATUR, 2011). Los primeros centros turísticos que fueron desarrollados por FONATUR fueron Cancún e Ixtapa en 1974, Los Cabos y Loreto en 1976 y Huatulco en 1984. Y de la cual el plan propuesto del turismo en dichos destinos, estaba enfocado a un desarrollo ordenado, considerando los aspectos ambientales y el desarrollo urbano en cada localidad (Juarez, et al, 2012). Estas acciones de gobierno federal además de las decisiones de gobierno estatal, fueron conduciendo a que el sector turístico fuera teniendo avances importantes en algunas variables, hasta posicionarse entre los destinos turísticos más importantes del mundo.

En este sentido, iremos analizando cada una de las principales variables turísticas para México así como vincularlos con algunos hechos históricos que influyeron en su evolución. Uno de ellos y que impactó en la llegada de turistas en los últimos años a México fue en el 2009, con la recesión económica internacional encabezado por países casualmente desarrollados y el surgimiento del nuevo virus de la influenza humana nombrado por las autoridades federales en México como H1N1. A nivel mundial los focos rojos en materia turística estuvieron alerta, sobre todo en el continente Americano. Lo anterior ocasionó que en el 2009 disminuyera el número de visitantes internacionales, y en consecuencia su derrama económica. Y por si fuera poco el consumo turístico de residentes del México también se vio mermado.

#### METODOLOGÍA

Para identificar las condiciones del sector turístico en México desde la década de los 80's se procedió a utilizar las principales fuentes estadísticas de organismos formales en México y a nivel internacional. Algunos de ellos, la Organización Mundial del Turismo (OMT), la Secretaría de Turismo (SECTUR) y el Instituto Nacional de Estadística y Geografía en México. De los cuales se obtuvieron las principales variables, para agruparlas y elaborar tablas que permitieran identificar su comportamiento desde la década de 1980 al año 2009. Siendo un periodo de gran interés para observar la evolución y repercusiones que ha tenido el sector con externalidades a nivel mundial.

#### RESULTADOS

Se puede apreciar en la Tabla 1, que después de una clara recuperación en captación de turistas internacionales al país del 2007 (21,370,000 millones de visitantes) al 2008 (22,637,000 visitantes) con un crecimiento del 5.9%, en el 2009 hay una disminución clara a 21,454 millones de visitantes. Incluso al 2008 se había alcanzado un crecimiento en llegadas de turistas internacionales a la zona fronteriza con el

11.0% y en turismo receptivo o al interior de la República también registró un aumento del 2.6%. Estas cifras son importantes, porque permiten ratificar la importancia del sector turístico en México, pues actualmente ocupa el octavo lugar de arribos de turistas entre los destinos a nivel internacional que es importante (Acevedo, et al., 2008; Altés, 2008), así mismo, el segundo lugar a nivel de América Latina, después de Estados Unidos (Acevedo, et al., 2008).

Año	Año Turistas internacionales a México			o Excursionistas internacionales a México		
	Total	Turismo receptivo	Turismo fronterizo	Total	Fronterizos	Pasajeros en crucero
1980 - 1985	-0.9	1.5	-2.0	-0.5	-1.7	440.6
1985 - 1990	33.6	52.0	24.7	24.1	24.3	15.3
1990 - 1995	17.9	21.8	15.6	0.4	-0.8	90.5
1995 - 1996	5.7	15.4	-0.4	5.8	5.3	26.2
1996 - 1997	-9.6	9.0	-23.0	6.6	6.7	5.2
1997 - 1998	0.2	-0.2	0.6	3.1	3.2	-0.3
1998 - 1999	-1.8	4.5	-8.2	6.6	5.7	35.7
1999-2000	8.4	3.7	13.8	5.2	4.9	13.7
2000 - 2001	-4.0	-4.2	-3.9	-4.9	-5.5	9.7
2001 - 2002	-0.7	-2.6	1.3	-0.5	-2.3	35.0
2002 - 2003	-5.1	4.8	-15.0	-8.5	-8.8	-3.1
2003-2004	10.5	11.6	9.1	6.7	5.0	30.5
2004 - 2005	6.3	8.5	3.5	3.3	3.3	3.3
2005 - 2006	-2.6	0.6	-6.8	-6.0	-6.3	-2.8
2006 - 2007	0.1	2.8	-3.8	-7.3	-8.4	4.6
2007 - 2008	5.9	2.6	11.0	-2.8	-2.5	-5.6
2008 - 2009	-5.2	-11.4	3.6	-5.9	-5.4	-11.5
2009 - 2010	4.4	n.d.	n.d.	n.d.	n.d.	n.d.

Tabla 1: Visitantes internacionales a México, 1980 a 2010 (Variación porcentual)

La tabla muestra la trayectoria de los visitantes internacionales a México, considerando la clasificación de turistas totales. Y que estos a su vez se dividen en los que visitan la zona fronteriza tanto norte como sur del país. Además también son considerados los visitantes que acuden al centro y el resto de las ciudades del México, sin considerar el fronterizo. Elaboración propia basado en INEGI (2010) y la Organización Mundial del Turismo (2011).

Pero del periodo de 2008 al 2009 se presentó una baja de llega de turistas internacionales al país del 5.2% en promedio, pasando de 22,637 a 21, 454 millones de visitantes. La cual tuvo mayor impacto al interior del país presentándose una disminución del turismo receptivo de -11.4% que representan 1,518 millones de visitantes. Y esto tiene que ver con el mayor impacto registrado en los aeropuertos internacionales. Así mismo, también apreciamos en la Tabla 1 que disminuyó la afluencia de excursionistas internacionales – quienes son visitantes que no pernoctan en un alojamiento colectivo o privado – y que en total disminuyó 5.9% impactando en 4,090 millones de turistas menos, y desde luego la crisis económica y el virus de la influenza también repercutió en los cruceros registrando una baja del 11.5%. A pesar de ello, según Altés (2008) afirma que México está entre los primeros destinos de cruceros a nivel mundial y que en la primera década del año 2000 ha ocupado el 60% del mercado.

Pero lamentablemente, especifica Altés que con el incremento de navíos y el tamaño de estos se están presentando problemas ambientales y de aglomeración. Ante ello, la polémica se ha incrementado sobre las medidas de mitigación y control del ambiente. Ante este hecho y posterior a las medidas de higiene y seguridad implementadas en cada Estado de México y en los principales aeropuertos del país, el Gobierno Federal tuvo que implementar acciones para reactivar el sector turístico, apoyando a las actividades turísticas y otros sectores afectados por la contingencia sanitaria (SECTUR, 2011). Sin embargo, para la Organización Mundial del Turismo [OMT] en un documento donde analiza las tendencias del turismo, se comenta que después de las crisis económica y de salud del 2009, a México le cuesta trabajo llegar a la normalidad. Esto debido a que toman fuerza los aspectos de violencia y tráfico de drogas, afectando al turismo, pues indican que para los turistas es frecuentemente difícil distinguir de las regiones (Estados) con violencia y sin violencia en un país (World Tourism Organization Network, 2010).

#### Gasto De Los Visitantes Internacionales A México

Además también se identificó que desde 1980 hemos visto el aumento de llegadas de visitantes internacionales a México, lo cual también se ha reflejado en el incremento en el gasto durante su estancia. Según la Tabla 2 ilustra que desde los últimos 25 años el gasto total de los visitantes internacionales es creciente, pasando de 2,065 millones de dólares (mdd) en 1980 hasta 10,817 mdd en el 2008. Sin embargo, en el año 2009 se presenta una caída en los gastos y alcanzar una cantidad inferior de 9,221 mdd. Este comportamiento fue debido a una combinación entre la crisis económica y al contingencia viral H1N1, y ante la cual al caer la afluencia turística total, su tasa de crecimiento del 2008 al 2009 bajó -14.8 puntos porcentuales. Por su parte el gasto del turismo al interior, registró una caída del -14.7 % y el turismo fronterizo -14.8%.En su caso, el gasto para los excursionistas internacionales a México tanto los fronterizos como los de crucero, disminuyó considerablemente. Incluso desde el 2007 al 2009 ha tenido variaciones porcentuales negativas, por ejemplo en el 2007 el gasto de excursionistas fronterizos fue de 2,024 mdd y en el 2008 bajó a 1,994 mdd, registrando una variación porcentual de -1.5.

Del periodo de 2008 a 2009 mostró también en esta categoría de excursionistas una mayor disminución, con -19.7 puntos porcentuales que significó pasar de un gasto de 1,994 mdd a 1,601 mdd. En relación al comportamiento del gasto de excursionistas internacionales a México que son pasajeros en cruceros, encontramos un comportamiento irregular, pero con una clara disminución en los últimos años. Tan solo del 2007 al 2008 se registró una disminución de 2.0%, pero aún fue mayor de 2008 a 2009 con -5.3 puntos porcentuales, registrando un gasto en el 2009 de los excursionistas por 453 millones de dólares.

La importancia que reviste el gasto de los visitantes internacionales recae principalmente en los turistas internacionales quienes tienen mayor gasto en nuestro país mayor al 70% del total desde el año 1980. Y los excursionistas han registrado cada vez menos del 30% del gasto en México. Considerando el turismo internacional, el que tiene un mayor gasto es el turismo receptivo con más del 80% y en los últimos cinco años esta clasificación ha alcanzado el 94%. Por su parte el turismo fronterizo con el transcurso de los años ha perdido participación porcentual, pues en 1980 abarcaba el 19% y en el 2009 ocupa el 6.0%. Vale la pena mencionar que el gasto de los turistas por crucero ha sido en aumento desde 1980 (con el 1.0%), hasta el 2009 ocupando el 22.0% del total de excursionistas internacionales.

2 065	1 671
	1 671
2 0 2 0	
2 020	1 720
3 934	3 401
4 688	4 051
5 110	4 470
	5 086
	5 135
	5 062
	5 816
	5 941
	6 084
	6 680
	7 784
	8 502
	8 955
	9 717
	10 116
	8 624

Tabla 2: Gasto total de visitantes internacionales a México, 1980 a 2009 (Millones de dólares)

Esta Figura muestra la tendencia del turismo total en México desde 1980 al 2009. Donde se aprecia un constante crecimiento sobre todo desde el año 2000. Pero también se identifica la clara disminución del turismo en el año 2009, derivado de crisis económica mundial y el estado de emergencia de salud denominada H1N1 por parte del Gobierno Mexicano. Elaboración propia basado en INEGI, 2010 y la Organización Mundial del Turismo, 2011.

Establecimientos Y Número De Cuartos De Hospedaje

Una forma de conocer y evaluar el desempeño del sector turístico son las inversiones realizadas en el número de establecimientos de hospedaje y el número de cuartos-habitación disponibles según la categoría. Esto es relevante porque en ella vemos reflejado la promoción de inversiones turísticas y que desde luego generan empleos, independientemente de la categoría de establecimiento que se trate. Al respecto Altés (2008) comenta que el turismo favorece la participación de México en la economía global y le permite enfrentar desafíos que se presentan en cada una de las regiones, que bien pueden ser desde problemas de pobreza, desempleo, otras.

Por eso no es de extrañar, como algunos Estados de la República Mexicana han procurado incentivar al turismo y el número de hoteles ha sido en aumento. Las estadísticas muestran que en México en 1980 había 7,837 establecimientos de hospedaje hasta llegar a alcanzar 16,526 establecimientos (Tabla 3). En dicho periodo se registraron dos tasas de crecimiento mayores que fueron del 2000/2001 (8.7 %) y de 2002/2003 (7.7%), además de 1980 al 2009 se tiene como crecimiento promedio anual de establecimientos en México de 2.61% - según lo indica la media geométrica de la Tabla 3.

Cabe señalar que por categoría turística identificamos que aquellos con considerados como hoteles de cinco estrellas tuvieron la mayor tasa de crecimiento promedio anual de 1980 a 2009, con el 4.82 porciento, según su media geométrica. Durante este intervalo de tiempo aquellos hoteles clasificados como cinco y cuatro estrellas tuvieron dos periodos de mayor crecimiento que fueron de 2000/2001 y de 2004/2005 superiores al 10%. Así mismo, es importante destacar que mientras las categorías más altas de hoteles tienen tasas de crecimiento más altas desde 1980 a 2009, los establecimientos sin categoría, de una y dos estrellas tienen tasas inferiores y negativas. Esto tiene que ver con la mayor promoción a la inversión por las autoridades, de ahí que muchos polos turísticos como Cancún, Puerto Vallarta y Los Cabos han ocupado terreno e importancia de hoteles de gran turismo, los cuales tienen que ver con los esfuerzos de planificación e inversión pública realizados por el gobierno federal.

Año	Total	Cinco estrellas a/	Cuatro estrellas	Tres estrellas	Dos estrellas	Una estrella	Sin categoría b/
Año 1980							
Establecimientos	7 837	266	556	1 262	1 677	4 076	n.d.
Cuartos	237 315	28 031	29 694	47 511	46 085	85 994	n.d.
Año 1990							
Establecimientos	7 984	199	395	775	1 185	1 027	4 403
Cuartos	333 547	49 496	44 827	43 433	44 875	32 896	118 020
Año 2000							
Establecimientos	10 320	460	961	1 727	1 708	1 959	3 505
Cuartos	421 850	86 574	82 322	76 858	54 069	48 380	73 647
Año 2009/p							
Establecimientos	16 526	1 041	1 714	2 849	2 208	2 555	6 159
Cuartos	621 946	164 771	120 842	104 544	59 957	52 969	118 863
Cuartos	021 940	104 //1		a Geométrica, an		52 707	110 005
Año 1980 a 2009/p			Wiedi	a Geometrica, an	441		
Establecimientos	2.61	4.82	3.96	2.85	0.95	-1.60	1.78
Cuartos	3.38	6.30	4.96	2.76	0.91	-1.66	0.04

Tabla 3: Comparativo de número de establecimientos de hospedaje y cuartos disponibles por categoría a nivel nacional, 1980 a 2009

La Tabla ilustra la trayectoria del número de establecimientos y cuartos disponibles para los turistas nacionales o internacionales desde 1980 al 2009. Indicando la clasificación por tipo de hotel según su calidad y servicios proporcionados. Donde el de mayor calidad son los de cinco estrellas y el de menor calidad y servicios son los de una estrella y sin categoría. Así mismo, muestra al crecimiento en el periodo de 1980 al 2009. De los cuales los establecimientos de hospedaje y cuartos que mas han crecido son los de cuatro estrellas y tres estrellas. Elaboración propia basado en el Anuario Estadístico de los Estados Unidos Mexicanos, SECTUR e INEGI, varios años.

Recordemos que esta planificación turística se inició desde hace más de dos décadas a través del Fondo Nacional de Fomento al Turismo con la finalidad de tener Centros Integralmente Planeados (CIP), lo cual sirvió para algunos de ellos crecieran de manera exponencial. Por lo que al impulsarse entre por la iniciativa pública entre 1974 y 1984 (Altés, 2008) a Cancún, Los Cabos, Loreto, Ixtapa y Huatulco les facilitó el crecimiento. En estos centros turísticos han dado señales de consolidación y con hoteles de gran clase y categoría, con las típicas dificultades de disminución de turistas en algunos periodos. Incluso vemos que posterior a este impulso de estos cinco destinos turísticos, FONATUR fue agregando otros más, entre ellos Sinaloa, Nayarit y Cozumel y que hasta la fecha vemos en la base de datos del Fondo, que se tiene el seguimiento de dichos destinos (FONATUR, 2011).

Esta consolidación de establecimientos de hospedaje lo podemos apreciar en la Tabla 4 y desde 1980 al 2009 el porcentaje de hoteles en la categoría de cinco y cuatro estrellas ha sido ascendente. En 1980 había 266 hoteles de cinco estrellas y que representaba el 3.4% a nivel nacional, para el año 2000 había 460 establecimientos que lo posicionaba en 4.5%. Para el 2009 se incremento el número de establecimientos y porcentaje a nivel nacional en 1,041 (6.3%). Lo mismo sucedió con los hoteles clasificados de cuatro estrellas, cuyo porcentaje a nivel nacional aumentó de 7.1% en 1980 a 10.4% en el 2009, con 1,714 establecimientos.Lo contrario ocurrió con los establecimientos clasificados de una y dos estrellas, que desde 1980 al 2009 han perdido participación porcentual respecto al total a nivel nacional. Pues en 1980 entre las dos clasificaciones antes mencionadas ocupaban el 73.4% (Tabla 4), en 1990 27.7% y en 2009 se llegó su participación a 28.8%. Lo que permite deducir dos cosas, quizá muchos de los establecimientos de hospedaje fueron avanzando y mejorando sus servicios, facilitando avanzar a una categoría más alta. O en su caso, que al mercado se fueron incorporando inversionistas con una aportación a capital superior, y permitiendo acceder a una clasificación mayor. Situación que a México país le permite tener una mejor oferta de los servicios de hospedaje no solo nacional sino a nivel internacional.

Figura 2: Porcentaje de establecimientos de hospedaje en servicio según categoría turística, 1980 a 2009

AÑO	Cinco estrellas	Cuatro estrellas	Tres estrellas	Dos estrellas	Una estrella	Sin categoría
1980	3.4%	7.1%	16.1%	21.4%	52.0%	0.0%
1990	2.5%	4.9%	9.7%	14.8%	12.9%	55.1%
2000	4.5%	9.3%	16.7%	16.6%	19.0%	34.0%
2009	6.3%	10.4%	17.2%	13.4%	15.5%	37.3%

La tabla muestra la composición de los establecimientos de hospedaje según su clasificación por estrellas, las cuales indican la calidad de los servicios proporcionados. Se observa que a nivel nacional en México que en todos los tipos de hoteles ha sido ascendente desde 1980 al 2009. La clasificación muestra que cada vez los destinos turísticos han fomentado más la incorporación de hoteles con un mayor nivel de calidad. Es decir, disminuyen los de menor calidad (Una estrella y sin categoría) y van aumentando los de mayor calidad (Cuatro y cinco estrellas). Elaboración propia basado en Anuario Estadístico de los Estados Unidos Mexicanos, SECTUR, INEGI, Varios años.

Por otra parte, en relación a la oferta existente encontramos que el número de cuartos disponibles a nivel nacional también tuvo tasas de crecimiento constantes, en promedio 3.38% promedio anual desde 1980 al 2009 (Tabla 2 y Figura 3). En 1980 la oferta turística nacional era de 237,315 cuartos, en el 2000 había 421,850, y en 2009 se alcanzaron 621,946 cuartos. Es importante mencionar que la oferta de cuartos por categoría

Figura 3: Distribución porcentual de cuartos disponibles según la categoría turística, 1980 a 2009.

	Cinco estrellas	Cuatro estrellas	Tres estrellas	Dos estrellas	Una estrella	Sin categoría
1980	11.8%	12.5%	20.0%	19.4%	36.2%	
1990	14.8%	13.4%	13.0%	13.5%	9.9%	35.4%
2000	20.5%	19.5%	18.2%	12.8%	11.5%	17.5%
2009	26.5%	19.4%	16.8%	9.6%	8.5%	19.1%

La Tabla muestra la composición de los cuartos disponibles según la categoría asignada desde cinco estrellas (categoría de mayor calidad) hasta sin categoría (categoría de menor calidad). Se observa que desde 1980 prevalecían cuartos con menor nivel de calidad. Para el año 2009 nos encontramos con una mayor proporción de cuartos clasificados con mayor calidad. Lo cual es indicativo de unas mayores participaciones de inversionistas internacionales y locales, que ofrecen mayor diversidad de hoteles enfocados a mejorar el sector turístico. Elaborado Anuario Estadístico de los Estados Unidos Mexicanos, SECTUR, INEGI, Varios años.

# CONCLUSIONES

Constatamos que México tiene potencial para crecer aun más en términos de afluencia turística. Esto debido a riqueza en los diferentes destinos turísticos, el aumento en número de hoteles, cuartos y servicios en general. Ante ello, tiene diferentes retos, como generar una mayor planeación y difusión como destino turístico, además de propiciar una mayor seguridad a los visitantes. Por tanto, este tema abre un abanico de oportunidades para seguir aportando en el tema y analizando estrategias que mejoren la posición de México como destino turístico a nivel mundial.

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# LA REFORMA LABORAL EN MÉXICO

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## RESUMEN

En este artículo se analiza de manera objetiva la reforma laboral sindical propuesta al Congreso de la Unión por el Presidente Felipe de Jesús Calderón Hinojosa. En las últimas cuatro décadas, los cambios en la legislación laboral han sido escasos, lo que hace aun más trascendentes los cambios que se pretenden introducir. La transparencia sindical es uno de los temas torales en dicha reforma legislativa. El análisis de los cambios propuestos por el ejecutivo en el ámbito sindical se hace necesario a fin de establecer en que forma se afecta o beneficia a los agremiados. Los cambios pueden considerarse como positivos o negativos dependiendo del punto de vista o interés subjetivo que se tenga, pero conviene hacer un análisis totalmente objetivo y considerar solo aquello que es favorable para las fuerzas laboral y capitalista.

PALABRAS CLAVES: Laboral, trabajo, ley y sindicato.

# LABOR REFORM IN MEXICO

## ABSTRACT

In this article is analyzed in an objective way the labor reform proposed to the Congress of the Union by the President Felipe de Jesus Calderon Hinojosa. In the last four decades, the changes in the labor legislation have been scanty, which makes more transcendent the changes that try to introduce. The union transparency is one of the top topics in the above mentioned legislative reform. The analysis of the changes proposed by the executive in the union matters it becomes necessary in order to establish if this is a benefit or concerns to the members of the union. The changes can be considered to be positives or negatives depending on the point of view or subjective interest that is had, but it suits to make a totally objective analysis and consider only that one that it is favorable for the labor and capitalist forces.

**JEL:** J0, J5, J8, K3, K31

KEYWORDS: Labor, work, law and union.

# INTRODUCCIÓN

En las dos últimas décadas México ha tenido grandes cambios en los ámbitos político, económico, social, cultural, laboral. Todo cambio ha reclamado adecuaciones a las reglamentaciones aplicables, pero el ámbito laboral se ha quedado rezagado al no operar cambios sustanciales en la regulación de las relaciones obrero-patronales. La Ley Federal del Trabajo en vigor data de 1970, y su entrada en vigor causó revuelo en los círculos laborales y se estimó aplicable para las circunstancias económicas reinantes en esa época. Hoy esas circunstancias han revolucionado pero no la ley laboral, haciéndose por lo tanto necesario el adecuar el marco normativo a la situación económica actual. Ha sido motivo de amplia controversia entre políticos y en la sociedad, y desde luego también entre los juristas, la formulación de una iniciativa de reforma a la legislación laboral propuesta por el Presidente de la Republica en turno. Y de todos los aspectos controvertidos toma especial relevancia el concerniente a la transparencia sindical, tema este que es ineludible tocar al ser la figura de la transparencia del manejo de recursos y de información un cambio que se ha venido aplicando a la mayoría de los ámbitos, salvo este de los sindicatos. Es importante dilucidar sus efectos y conveniencias para el futuro de México.

Con motivo de los cambios que se pretenden introducir en la Ley Federal del Trabajo se han dado múltiples discusiones entre grupos antagonistas e incluso dentro de grupos afines. Esto ha originado opiniones a favor y en sentido contrario a los cambios. Asimismo la literatura que se ha creado ha fijado esas dos posiciones contrarias únicamente, sin que exista una posición ecléctica en su parte toral puesto que la transparencia sindical es un punto que algunos no desean sea aprobado por razón de que verán afectados sus intereses, dando con ello una serie de argumentos que a los ojos de sus detractores no son válidos y si por el contrario pretenden establecer los suyos.

#### RESULTADOS

La propuesta de reforma laboral presentada al Congreso de la Unión por el Presidente de la Republica pretende introducir diversos cambios en la Ley Federal del Trabajo entre los que destacan los relativos a la transparencia sindical. Este tema cobra suma importancia por motivo de que existen en México un gran número de sindicatos que son manejados por lideres que no tienen obligación legal alguna de transparentar el uso que hacen de los recursos que reciben de los patrones, y que en muchos de esos sindicatos son los gobiernos federal y estatales y municipales los que les aportan dinero, convirtiéndose entonces en un asunto de interés general porque implica dinero que proviene del erario público.

En la Tabla 1 se transcribe el texto actual de los artículos de la Ley Federal del Trabajo que se pretenden reformar y que se encuentran dentro del capítulo II del Titulo Séptimo que se refiere relativo a los sindicatos, así como el texto propuesto para esos artículos:

TEXTO ACTUAL	TEXTO PROPUESTO
Artículo 357 Los trabajadores y los patrones tienen el derecho de constituir sindicatos, sin necesidad de autorización previa.	Artículo 357 Los trabajadores y los patrones tienen el derecho de constituir sindicatos, sin necesidad de autorización previa.
	Cualquier injerencia indebida será sancionada en los términos que disponga la ley.
Artículo 361 Los sindicatos de patrones pueden ser:	Artículo 361 Los sindicatos de patrones pueden ser:
I. Los formados por patrones de una o varias ramas de actividades; y	I. Los formados por patrones de una o varias ramas de actividades;
II. Nacionales, los formados por patrones de una o varias ramas de actividades de distintas Entidades Federativas.	II. Nacionales, los formados por patrones de una o varias ramas de actividades de distintas entidades federativas; y
	III. Industriales, los formados por patrones de la misma rama industrial en una o varias entidades federativas.
	Artículo 364 Bis. En el registro de los sindicatos se deberán observar los principios de legalidad, transparencia, certeza, gratuidad, inmediatez, imparcialidad y respeto a la libertad, autonomía y democracia sindical.
Artículo 365 Los sindicatos deben registrarse en la Secretaría del Trabajo y Previsión Social en los casos de competencia federal y en las Juntas de Conciliación y Arbitraje en los de competencia local, a cuyo efecto remitirán por duplicado:	Artículo 365. Los sindicatos deben registrarse en la Secretaría del Trabajo y Previsión Social en los casos de competencia federal y en las Juntas de Conciliación y Arbitraje en los de competencia local, a cuyo efecto remitirán por duplicado <u>bajo protesta de decir verdad, los</u> <u>documentos siguientes:</u>
I. Copia autorizada del acta de la asamblea constitutiva;	I. Copia autorizada del acta de la asamblea constitutiva;
II. Una lista con el número, nombres y domicilios de sus miembros y con el nombre y domicilio de los patrones, empresas o establecimientos en los que se prestan los servicios;	II. Una lista con el número, nombres y domicilios de sus miembros y con el nombre y domicilio de los patrones, empresas o establecimientos en los que se prestan los servicios;
III. Copia autorizada de los estatutos; y	III. Copia autorizada de los estatutos; y
IV. Copia autorizada del acta de la asamblea en que se hubiese elegido la directiva.	IV. Copia autorizada del acta de la asamblea en que se hubiese elegido la directiva.
Los documentos a que se refieren las fracciones anteriores serán autorizados por el Secretario General, el de Organización y el de Actas, salvo lo dispuesto en los estatutos.	Todos los documentos deberán estar autorizados por las personas facultadas en los estatutos.
Actas, saivo to disputsio til los tstatulos.	A falta de alguno de los documentos a que se refieren las fracciones

Tabla 1: Comparativo de Reformas Propuestas.

	anteriores, el registrador requerirá al solicitante a fin de que subsane		
	dicha omisión en un término no mayor a treinta días. Transcurrido dicho término sin que se exhiban los documentos requeridos, se desechará la solicitud y se ordenará el archivo, por falta de interés.		
	Artículo 365 Bis. Las autoridades a que se refiere el artículo anterior harán pública, para consulta de cualquier persona, debidamente actualizada la información de los registros de los sindicatos. Asimismo, deberán expedir copias de los documentos que obren en los expedientes de registro que se les soliciten, en términos de lo dispuesto por la Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental y de las leyes que regulen el acceso a la información gubernamental de las entidades federativas, según corresponda.		
	De preferencia, el texto íntegro de las versiones públicas de los estatutos de los sindicatos deberá estar disponible en los sitios de Internet de la Secretaría del Trabajo y Previsión Social y de las Juntas Locales de Conciliación y Arbitraje, según corresponda.		
	Los registros de los sindicatos deberán contener, cuando menos, los siguientes datos:		
	I. Domicilio;		
	II. Número de registro;		
	III. Nombre del sindicato;		
	IV. Nombre de los integrantes del Comité Ejecutivo;		
	V. Fecha de vigencia del Comité Ejecutivo;		
	VI. Número de socios, y		
	VII. Central obrera a la que pertenecen, en su caso.		
	La actualización de los índices se deberá hacer cada tres meses.		
Artículo 366 El registro podrá negarse únicamente:	Artículo 366 El registro podrá negarse únicamente:		
I. Si el sindicato no se propone la finalidad prevista en el artículo 356;	I. Si el sindicato no se propone la finalidad prevista en el artículo 356;		
II. Si no se constituyó con el número de miembros fijado en el artículo 364; y	II. Si no se constituyó con el número de miembros fijado en el artículo 364; y		
III. Si no se exhiben los documentos a que se refiere el artículo anterior.	III. Si no se exhiben los documentos a que se refiere el artículo <u>365.</u>		
Satisfechos los requisitos que se establecen para el registro de los sindicatos, ninguna de las autoridades correspondientes podrá negarlo.	Satisfechos los requisitos que se establecen para el registro de los sindicatos, ninguna de las autoridades correspondientes podrá negarlo.		
Si la autoridad ante la que se presentó la solicitud de registro, no resuelve dentro de un término de sesenta días, los solicitantes podrán requerirla para que dicte resolución, y si no lo hace dentro de los tres días siguientes a la presentación de la solicitud, se tendrá por hecho el registro para todos los efectos legales, quedando obligada la autoridad, dentro de los tres días siguientes, a expedir la constancia respectiva.	Si la autoridad ante la que se presentó la solicitud de registro, no resuelve dentro de un término de sesenta días <u>naturales</u> , los solicitantes podrán requerirla para que dicte resolución, y si no lo hace dentro de los tres días siguientes a la presentación de la solicitud, se tendrá por hecho el registro para todos los efectos legales, quedando obligada la autoridad, dentro de los tres días siguientes, a expedir la constancia respectiva.		
Artículo 371 Los estatutos de los sindicatos contendrán:	Artículo 371 Los estatutos de los sindicatos contendrán:		
I. Denominación que le distinga de los demás;			
II. Domicilio;	I. Denominación que le distinga de los demás; II. Domicilio;		
III. Objeto;			
IV. Duración. Faltando esta disposición se entenderá constituido el sindicato por tiempo indeterminado;	<ul> <li>III. Objeto;</li> <li>IV. Duración. Faltando esta disposición se entenderá constituido el cindicato por tiempo indeterminedo;</li> </ul>		
V. Condiciones de admisión de miembros;	sindicato por tiempo indeterminado;		
VI. Obligaciones y derechos de los asociados;	V. Condiciones de admisión de miembros;		
VII. Motivos y procedimientos de expulsión y correcciones	VI. Obligaciones y derechos de los asociados;		
disciplinarias. En los casos de expulsión se observarán las normas siguientes:	VII. Motivos y procedimientos de expulsión y correcciones disciplinarias. En los casos de expulsión se observarán las normas siguientes:		
<ul> <li>a) La asamblea de trabajadores se reunirá para el solo efecto de conocer de la expulsión.</li> </ul>	a) La asamblea de trabajadores se reunirá para el solo efecto de		

b) Curreda da sindiantes intermedes non escritores el	conocer de la expulsión.		
b) Cuando se trate de sindicatos integrados por secciones, el procedimiento de expulsión se llevará a cabo ante la asamblea de la sección correspondiente, pero el acuerdo de expulsión deberá someterse a la decisión de los trabajadores de cada una de las secciones que integren el sindicato.	b) Cuando se trate de sindicatos integrados por secciones, el procedimiento de expulsión se llevará a cabo ante la asamblea de la		
<ul> <li>c) El trabajador afectado será oído en defensa, de conformidad con las disposiciones contenidas en los estatutos.</li> </ul>			
d) La asamblea conocerá de las pruebas que sirvan de base al procedimiento y de las que ofrezca el afectado.			
e) Los trabajadores no podrán hacerse representar ni emitir su voto por escrito.	e) Los trabajadores no podrán hacerse representar ni emitir su voto por		
<li>f) La expulsión deberá ser aprobada por mayoría de las dos terceras partes del total de los miembros del sindicato.</li>	f) La expulsión deberá ser aprobada por mayoría de las dos terceras		
<ul> <li>g) La expulsión sólo podrá decretarse por los casos expresamente consignados en los estatutos, debidamente comprobados y exactamente aplicables al caso;</li> </ul>	<ul> <li>partes del total de los miembros del sindicato.</li> <li>g) La expulsión sólo podrá decretarse por los casos expresamente consignados en los estatutos, debidamente comprobados y exactamente aplicables al caso;</li> </ul>		
VIII. Forma de convocar a asamblea, época de celebración de las ordinarias y quórum requerido para sesionar. En el caso de que la directiva no convoque oportunamente a las asambleas previstas en los estatutos, los trabajadores que representen el treinta y tres por ciento del total de los miembros del sindicato o de la sección, por lo menos, podrán solicitar de la directiva que convoque a la asamblea, y si no lo hace dentro de un término de diez días, podrán los solicitantes hacer la convocatoria, en cuyo caso, para que la asamblea pueda sesionar y adoptar resoluciones, se requiere que concurran las dos terceras partes del total de los miembros del sindicato o de la sección.	VIII. Forma de convocar a asamblea, época de celebración de las ordinarias y quórum requerido para sesionar. En el caso de que la directiva no convoque oportunamente a las asambleas previstas en los estatutos, los trabajadores que representen el treinta y tres por ciento del total de los miembros del sindicato o de la sección, por lo menos, podrán solicitar de la directiva que convoque a la asamblea, y si no lo hace dentro de un término de diez días, podrán los solicitantes hacer la convocatoria, en cuyo caso, para que la asamblea pueda sesionar y adoptar resoluciones, se requiere que concurran las dos terceras partes del total de los miembros del sindicato o de la sección.		
Las resoluciones deberán adoptarse por el cincuenta y uno por ciento del total de los miembros del sindicato o de la sección, por lo menos;	Las resoluciones deberán adoptarse por el cincuenta y uno por ciento del total de los miembros del sindicato o de la sección, por lo menos;		
IX. Procedimiento para la elección de la directiva y número de sus miembros;	IX. <u>Número de miembros de la directiva y procedimiento para s</u> elección, que deberá ser mediante voto libre, directo y secreto.		
X. Período de duración de la directiva;	X. Período de duración de la directiva;		
XI. Normas para la administración, adquisición y disposición de los bienes, patrimonio del sindicato;			
XII. Forma de pago y monto de las cuotas sindicales;	XII. Forma de pago y monto de las cuotas sindicales;		
XIII. Época de presentación de cuentas;	<ul> <li>XIII. Época de presentación de cuentas <u>y sanciones a sus directivos e</u> caso de incumplimiento.</li> </ul>		
	Para tales efectos, se deberán establecer instancias y procedimientos internos que aseguren la resolución de controversias entre los agremiados, con motivo de la gestión de los fondos sindicales.		
XIV. Normas para la liquidación del patrimonio sindical; y	XIV. Normas para la liquidación del patrimonio sindical; y		
XV. Las demás normas que apruebe la asamblea.	XV. Las demás normas que apruebe la asamblea.		
Artículo 373 La directiva de los sindicatos debe rendir a la asamblea cada seis meses, por lo menos, cuenta completa y detallada de la administración del patrimonio sindical. Esta obligación no es dispensable.	Artículo 373. La directiva de los sindicatos, en los términos que		
	Además de las previsiones anteriores, si el sindicato está integrado por más de 150 miembros, los resultados de la administración del patrimonio sindical deberán ser dictaminados anualmente por un auditor externo. En todos los casos, los resultados serán difundidos ampliamente entre los miembros del sindicato, por cualquier medio al alcance de la agrupación y de los propios trabajadores.		
	Las obligaciones a que se refieren los dos párrafos anteriores no son dispensables.		
	En todo momento cualquier trabajador tendrá el derecho de solicitar información a la directiva, sobre la administración del patrimonio del		

	sindicato.
	En caso de que los trabajadores no hubieren recibido la información sobre la administración del patrimonio sindical, o estimen la existencia de irregularidades en la gestión de los fondos sindicales, podrán acudir a las instancias y procedimientos internos previstos en los respectivos estatutos, en términos del artículo 371, fracción XIII de esta Ley. De no existir dichos procedimientos o si agotados éstos, no se proporciona la información o las aclaraciones correspondientes, podrán tramitar ante la Junta de Conciliación y Arbitraje que corresponda, el cumplimiento de dichas obligaciones. Si pese al requerimiento de la Junta subsiste el incumplimiento, se ordenará la suspensión del pago de sus cuotas sindicales, conforme a lo dispuesto en el artículo 894 de la Ley.
<ul> <li>Artículo 377 Son obligaciones de los sindicatos:</li> <li>I. Proporcionar los informes que les soliciten las autoridades del trabajo, siempre que se refieran exclusivamente a su actuación como sindicatos;</li> <li>II. Comunicar a la autoridad ante la que estén registrados, dentro de un término de diez días, los cambios de su directiva y las modificaciones de los estatutos, acompañando por duplicado copia autorizada de las actas respectivas; y</li> <li>III. Informar a la misma autoridad cada tres meses, por lo menos, de las altas y bajas de sus miembros.</li> <li>Artículo 380 En caso de disolución del sindicato, el activo se aplicará en la forma que determinen sus estatutos. A falta de disposición expresa, pasará a la federación o confederación a que pertenezca y si no existen, al Instituto Mexicano del Seguro Social.</li> </ul>	<ul> <li>El ejercicio de las acciones a que se refiere el párrafo anterior, por ningún motivo implicará la pérdida de derechos sindicales, ni será causa para la expulsión o separación del trabajador inconforme.</li> <li>Artículo 377 Son obligaciones de los sindicatos: <ol> <li>Proporcionar los informes que les soliciten las autoridades del trabajo, siempre que se refieran exclusivamente a su actuación como sindicatos;</li> <li>Comunicar a la autoridad ante la que estén registrados, dentro de un término de diez días, los cambios de su directiva y las modificaciones de los estatutos, acompañando por duplicado copia autorizada de las actas respectivas; y</li> <li>Informar a la misma autoridad cada tres meses, por lo menos, de las altas y bajas de sus miembros.</li> <li>Las obligaciones a que se refiere este artículo podrán ser cumplidas a través de medios electrónicos, en los términos que determinen las autoridades correspondientes.</li> </ol> </li> <li>Artículo 380. Los bienes del sindicato son los que integran su patrimonio. En caso de disolución, si no hay disposición expresa en los estatutos, aquéllos pasarán al patrimonio de la federación a la que pertenezca y a falta de ésta, a la confederación a la cual estén agremiados, y a falta de ambas, al Instituto Mexicano del Seguro Social.</li> </ul>
	agremiados, se entiende por éstos a quienes estén en activo hasta un año antes de la disolución. La representación del sindicato subsistirá para el solo efecto de entrega, reparto, liquidación o venta de los bienes, sin embargo podrá revocarse si así lo determina la mayoría de los agremiados con derecho a reparto.

Se observa en la Tabla 1 que las reformas propuestas por el presidente en lo atinente a los sindicatos tienen que ver, además de la transparencia en el manejo de los recursos económicos, con temas que también atañen a la vida y funcionamiento de esas organizaciones de trabajadores.En la propuesta de modificación del artículo 357 se debe considerar que la constitución de sindicatos normalmente se debe llevar a cabo sin injerencia de personas extrañas y se trata de eliminar el que su creación sea manipulada ya sea por el patrón o personas que tengan un interés distinto al laboral.

En los tipos de sindicatos de patrones que menciona la reforma al artículo 351 se agrega una clasificación más que es la correspondiente a los sindicatos industriales para abarcar a aquellos patronos que se dediquen a la misma rama industrial en una o distintas entidades federativas. Se propone agregar también el artículo 364 bis para establecer que en el registro de los sindicatos se deberán observar los principios de legalidad, transparencia, certeza, gratuidad, inmediatez, imparcialidad y respeto a la libertad, autonomía y democracia sindical. Pero lo importante seria destacar en que forma se cumplen esos principios, pues de antemano y en un marco de legalidad deben existir, pero en la práctica pueden tergiversarse o ignorarse dando con ello lugar a vicios sindicales.

Asimismo se pretende que al solicitar el registro de un sindicato ante la Secretaría del Trabajo y Previsión Social en los casos de competencia federal y en las Juntas de Conciliación y Arbitraje en los de competencia local, deben acompañarse documentales "bajo protesta de decir verdad". La redacción es equivoca ya que se va a manifestar bajo protesta de decir verdad que se están exhibiendo los documentos requeridos, cuando en realidad la protesta debe ser relativa a la veracidad del contenido de esos documentos que se exhiban para obtener el registro.

Se elimina también la obligación de que los documentos sean autorizados por Secretario General, el de Organización y el de Actas, para quedar en el sentido de que deben estar autorizados por las personas facultadas en los estatutos. Esta reforma propuesta resulta innecesaria ya que actualmente la parte final del artículo 365 establecía que debían ser autorizadas por aquellas personas, salvo lo dispuesto en los estatutos, con lo que se da opción a que sean autorizadas por cualesquier otra persona facultada para ello. Continuando con ese mismo artículo 365 se propone que no sea un motivo de desechamiento de la solicitud de registro la falta de uno de los documentos necesarios para obtenerlo, ya que actualmente así ocurre cuando no se cumple con ello, pero la reforma otorga al solicitante del registro el derecho a ser requerido para que exhiba el documento omitido en un plazo de treinta días, pasados los cuales sin que se hubiera subsanado la omisión entonces si se desechará la solicitud.

Se propone también adicional un artículo denominado 365 bis a través del cual en aras del derecho constitucional de acceso a la información, se haga pública por las autoridades la información sobre registro de sindicatos y documentación relativa este acto. Asimismo es plausible que adecuándose a los avances tecnológicos se proponga la publicación de los estatutos vía internet, dándose a conocer como mínimo información que identifique plenamente al sindicato, la cual deberá ser actualizada cuando menos cada tres meses. En la reforma propuesta del artículo 366 se hace la distinción muy importante respecto del término que se tiene para requerir a la autoridad ante la que se solicitó el registro para que resuelva al respecto, ya que actualmente son sesenta días, pero no se especifica si se trata de días naturales o hábiles. Ahora bien, la regla general ha sido en el sentido de que esos días deben entenderse hábiles, lo que resulta en que ese término de sesenta días se convierte aproximadamente en noventa o cien días al no considerarse en su cómputo sábados y domingos o días festivos.

En la reforma se propone que el cómputo de esos sesenta días sea naturales. Otro artículo que se propone reformar es el 371 que se refiere al contenido de los estatutos de los sindicatos en lo que refiere la fracción IX que actualmente dispone respecto del procedimiento para la elección de la directiva y número de sus miembros, aumentándose ahora que la elección deberá ser mediante voto libre, directo y secreto. Este tema ha desatado gran controversia pues de manera consistente se ha usado que al elegir un sindicato se hace mediante el nombramiento de delegados que son elegidos por los trabajadores a fin de que externen su voluntad en una sesión en la que se lleva a cabo la elección. Esto deja la voluntad de los trabajadores supeditada al arbitrio del delegado que designen, quien votara en la forma que mejor convenga a sus intereses y no de los trabajadores que representa. Es por ello que ahora se propone que el voto sea emitido directamente por el trabajador sin ningún intermediario que pueda tergiversar su voluntad, y secreto para evitar cualquier represalia por parte de aquellos que resulten ganadores y en contra de los que no votaron a su favor, así como también libre, sin presión, sin coacción alguna.En la fracción XIII del artículo en comento, se propone por el ejecutivo federal que en los estatutos se establezcan sanciones a los directivos sindicales cuando no cumplan en tiempo con la presentación de cuentas, y la fijación de instancias y procedimientos internos que aseguren la resolución de controversias entre los agremiados, con motivo de la gestión de los fondos sindicales. Nuevamente esta reforma causa controversia en este apartado al dar lugar a que cualquier agremiado pueda elevar algún procedimiento que tenga como objeto dirimir alguna controversia respecto del manejo de los fondos sindicales.

Actualmente los directivos sindicales tienen de conformidad con el artículo 373 de la Ley Federal del Trabajo, la obligación de rendir a la asamblea cada seis meses, por lo menos, cuenta completa y detallada de la administración del patrimonio sindical. Con la reforma se propone que además esa rendición de cuentas incluya información relativa a la situación de los ingresos por cuotas sindicales y otros bienes, así como su destino, con la obligación además de entregar un resumen de esta información, a cada uno de los trabajadores sindicalizados, dentro de los diez días siguientes de cada periodo, a más de que en sindicatos con más de 150 miembros, los resultados de la administración del patrimonio sindical deberán ser dictaminados anualmente por un auditor externo y los resultados.

Así también cualquier trabajador tendrá el derecho de solicitar información a la directiva, sobre la administración del patrimonio del sindicato, así como de iniciar los procedimientos jurídicos que se requieran para obtener dicha información y en caso de estimar la existencia de irregularidades tomar las acciones que resulten, sin que en ningún caso sus derechos sindicales se vean afectados. Esta es la parte que se ha considerado más controversial de toda la reforma laboral, ya que los intereses en juego en un sindicato suman cantidades estratosféricas que son manejadas por los directivos sindicales a su antojo y sin obligación de dar una explicación detalladas a los agremiados de su manejo, así como tampoco existe el derecho de estos últimos de pedir cuentas e iniciar acciones legales para obtener la información y pedir castigo cuando se estime que existe una irregularidad.

Los partidos políticos, que son actores directos en la aprobación o desaprobación de la reforma laboral, han externado sus puntos de vista de manera muy distinta, unos a favor y otros en contra, por motivo de que muchos de los recursos que se manejan en los sindicatos se menciona que son destinados a financiar campañas políticas, y el hecho de que los directivos tengan que rendir cuentas pormenorizadas da lugar a que no puedan distraerse recursos para objeto distinto a aquellos estrictamente sindicales, así como en caso de que ocurriese, se verían expuestos a acciones de tipo legal en el ámbito penal o civil, además de la destitución de sus cargos.Por cuanto hace a las obligaciones sindicales, la reforma al artículo 377 de la ley laboral propone que la información que deben proporcionar los sindicatos pueden hacerlo a través de medios electrónicos, situación esta que desde luego es acorde con la modernización tecnológica.

Para finalizar, la reforma que se formula al artículo 380 de la legislación laboral pretende regular de una manera más amplia el manejo del patrimonio sindical en caso de disolución del sindicato, situación que debe estar establecida en los estatutos de la propia unión sindical, pero que en caso de no ser así se aplicarán las reglas contenidas en ese mismo artículo. Lo conveniente es que si el patrimonio del sindicato fue creado por los agremiados, entonces sea a estos a quien regrese ese patrimonio.

#### CONCLUSIONES

La reforma laboral propuesta por el ejecutivo federal mexicano es adecuada para que el país pueda participar en un mundo globalizado como lo demanda la situación económica actual. Los cambios implican una dinámica que debe abarcar todos los aspectos de la vida de un país incluyéndose en esto las leyes. No se puede sostener la idea de seguir regulando las relaciones laborales y sindicales con base en criterios legislativos de hace más de cuarenta años. Los sindicatos han sido de gran influencia en la vida política y económica de México, lo que hace aun mas relevante el hecho de que se proponga regular su funcionamiento adecuándolo a los principios de transparencia y de acceso a la información que han sido una bandera del gobierno como apertura hacia los ciudadanos y en este caso hacia los agremiados de un sindicato. Han llegado a ser sumamente poderosos económica y políticamente, y sus lideres, en algunos casos, se han enriquecido sin que ninguno de los agremiados tenga derecho a cuestionarles su actuar o el manejo del patrimonio sindical, por ello es que la reforma se ve afectada en su aprobación por aquellos que ven sus intereses personales en peligro al tener que rendir cuentas sobre aquello que legalmente corresponde a los trabajadores y más cuando proviene del erario público.

#### REFERENCIA

Iniciativa de Decreto que reforma, adiciona y deroga diversas disposiciones de la Ley Federal del Trabajo, signada por el Presidente de los Estados Unidos Mexicanos el día 31 de Agosto de 2012.

Ley Federal de Trabajo.

# BIOGRAFÍA

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# ELEMENTOS DE UN MODELO DE ADMINISTRACIÓN FINANCIERA PARA LAS PEQUEÑAS EMPRESAS COMERCIALES

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## RESUMEN

Este trabajo es parte de una investigación que se encuentra en desarrollo la cual tiene como objetivo diseñar un modelo de administración financiera para la competitividad de las pequeñas empresas comerciales en Mexicali, B.C., analizando para ello la relación que existe entre la aplicación de la administración financiera en este tipo de empresas y el efecto que tiene en su competitividad, que son las variables del cual parte este modelo. El diseño de investigación es descriptivo, no experimental, transversal. Utilizando como instrumento de medición un cuestionario el cual fue sometido a pruebas estadísticas a través del alfa de Cronbach para determinar su confiabilidad y poner a prueba la hipótesis de este estudio. El número de encuestas analizadas para la presentación de este trabajo fue de sesenta pequeñas empresas comerciales.En este avance se presentan los principales resultados obtenidos hasta el momento sobre las encuestas que han sido aplicadas sobre las dimensiones de la variable de administración financiera como son información financiera, obtención y control de recursos, así como el riesgo. Asimismo los resultados que se refieren a las dimensiones de la variable de competitividad como son el mercado, precio y rentabilidad. Estableciendo con ello los elementos que deben integrar al modelo planteado y lograr que estas empresas logren una mayor permanencia en el mercado e incrementen su competitividad.

PALABRAS CLAVE: Administración financiera, competitividad y pequeñas empresas.

# ELEMENTS OF A FINANCIAL MANAGEMENT MODEL FOR SMALL BUSINESS ENTERPRISES

#### ABSTRACT

This work is part of an investigation that is under development which aims to design a model of financial management for the competitiveness of small business enterprises in Mexicali, BC, including by examining the relationship between the application of financial management in these businesses and the effect on their competitiveness, which are the variables which part this model. The research design is descriptive, not experimental, cross. Using as a questionnaire measuring instrument which was tested statistics through Cronbach's alpha to determine their reliability and to test the hypothesis of this study. The number of surveys analyzed for the presentation of this work was sixty small business enterprises. In this development presents the main results obtained so far on the surveys that have been applied to the variable dimensions of financial management such as financial information, procurement and control of resources and risk. Also the results relating to the dimensions of the variable such as the competitive market price and profitability. Thereby establishing the elements to be included in the proposed model and make these companies achieve greater permanence in the market and increase their competitiveness. **JEL:** M19, G00

**KEYWORDS:** Financial management, competitiveness and small businesses.

# INTRODUCCIÓN

Las pequeñas empresas tienen un importante papel en el desarrollo y crecimiento económico de en México y el mundo, asimismo en el Estado de Baja California y el municipio de Mexicali, que es el lugar donde se está desarrollando este trabajo de investigación. Por tanto los problemas que se presentan en este tipo de empresas repercute desfavorablemente en los indicadores macroeconómicos y sociales del País de que se trate, por lo cual es necesario llevar a cabo acciones que coadyuven a su permanencia, atendiendo a sus necesidades y los cambios que se dan en su entorno, de tal forma que puedan reaccionar con rapidez y ajustarse con facilidad y prontitud a estos. Asimismo, se debe analizar la forma en que se toman las decisiones al interior de estas empresas midiendo el impacto que pueden tener en las distintas áreas que la integran, poniendo especial interés en las modificaciones que puede tener en su capacidad de inversión, producción, solvencia, liquidez y la rentabilidad, en virtud de que los cambios en estos indicadores repercuten en aspectos relacionados con el poder mantener un precio competitivo y participar en nuevos mercados. De acuerdo con el Sistema de Información Empresarial Mexicano (SIEM, 2012), actualmente el segmento de la micro y pequeña empresa representan casi el 98% de las unidades económicas existentes en México. Por su gran volumen estas empresas son parte fundamental en la economía del país convirtiéndose en potenciales desarrolladoras de empleo y generadoras de ingresos, siendo un medio para avanzar hacia una mejor calidad de vida de los empresarios y mejorar la competitividad del país.

#### <u>Objetivo</u>

El objetivo de esta investigación es desarrollar un modelo de administración financiera el cual pueda contribuir al desempeño de las pequeñas empresas comerciales de Baja California, de tal manera que permita el incremento del nivel competitivo a través de una mejor administración de sus recursos financieros. De este objetivo se derivan los siguientes objetivos específicos:

- Realizar un diagnóstico sobre la administración de los recursos financieros de las pequeñas empresas.
- Proponer y/o complementar elementos que debe contener el modelo de administración financiera.
- Elaborar un modelo de administración financiera de acuerdo a las necesidades de las pequeñas empresas.
- Diseñar un programa de capacitación para la implementación del modelo en las pequeñas empresas.

#### Planteamiento del Problema

El aspecto financiero es básicamente el soporte que valida la lógica en las empresas en virtud de que cualquier negocio requiere tener una estabilidad financiera para poder seguir operando. Asimismo la toma de decisiones financieras impacta el desarrollo de todas las áreas que integran a la empresa, por ello es vital que las empresas tengan una adecuada administración financiera de sus recursos.

Mercado (2007) refiere que más del 90% del fracaso de las pequeñas empresas es debido a su mala administración, dentro de la cual las finanzas ocupan un lugar importante. Así, tanto la operación financiera como su administración son factores muy importantes en la operación diaria y en la toma de decisiones del pequeño empresario, que garantizan el éxito de la empresa en una economía de crecimiento y desarrollo continuo.En este sentido Anzola (2010) señala que la importancia del aspecto financiero para estas empresas corresponde a que está directamente relacionado al capital disponible con que cuenta por lo menos para su operación normal y con el cual la empresa comenzará a desarrollarse. Ante esta situación se tiene que analizar la manera de cómo podría el empresario tener una mejor administración

financiera de sus recursos y cuál es la información financiera que requiere para tomar mejores decisiones sobre su funcionamiento, así como de las herramientas que puede aplicar ante los problemas que con mayor frecuencia se le presentan en su negocio.En base a esta información es que surge el planteamiento del problema de investigación, el cual es poder conocer y determinar ¿Qué elementos debe contener el modelo de administración financiera que permita a las pequeñas empresas en Mexicali, B.C. incrementar su nivel competitivo a través de una mejor administración de sus recursos financieros?

#### Hipótesis

La falta de un modelo de administración financiera afecta la competitividad de las pequeñas empresas comerciales.

# **REVISIÓN LITERARIA**

#### Pequeñas Empresas Comerciales

El objeto de estudio de esta investigación son las pequeñas empresas dedicadas al comercio. Rodríguez (2010) define a las empresas comerciales como aquellas que se dedican a adquirir cierta clase de bienes o productos, con el objeto de venderlos posteriormente en el mismo estado físico en que fueron adquiridos, aumentando al precio de costo o adquisición un porcentaje denominado "margen de utilidad". Para definir lo que para este estudio se entenderá como pequeña empresa comercial, se atendió a los establecido en la Ley para el Desarrollo de la Competitividad de la Micro, Pequeña y Mediana Empresa, publicada en el Diario Oficial de la Federación el 30 de diciembre del 2009, en virtud de que la clasificación que se hace sobre las empresas es la oficial de acuerdo a la Secretaría de Economía, la cual se encuentra establecida por estratos y se basa en el número de empleados que posee la empresa. Esta ley establece que una pequeña empresa del sector comercio es aquella que se encuentra constituida de 11 a 30 empleados.

En atención a lo señalado anteriormente una pequeña empresa comercial es la que se dedica a adquirir cierta clase de bienes o productos, con la finalidad de venderlos posteriormente en el mismo estado físico en que se adquirieron, aumentando al precio de costo o adquisición, un porcentaje denominado "margen de utilidad" y que tenga de 11 a 30 empleados. De acuerdo al SIEM (2012) las pequeñas empresas de comercio son de gran importancia en nuestro país representando el 32.96% de las empresas que existen a nivel nacional, en el Estado de Baja California estas empresas constituyen el 36.48% y en Mexicali estas representan el 39.89%.

#### Características Generales Y Funcionales De Las Pequeñas Empresas

Barragán (2009) señala que las pequeñas empresas poseen ciertas características generales que las hacen diferentes al resto de las empresas y a través de las cuales pueden ser fácilmente reconocidas. Entre estas características se encuentran las siguientes:

- a. Administración independiente, usualmente dirigida y operada por el propio dueño.
- b. Los empresarios tienen a su cargo las ventas de los productos, o las supervisan personalmente.
- c. El número de personal tiene un límite inferior y otro superior. En México oscila entre 11 y 50.
- d. Incidencia no significativa en el mercado debido a que el área de operaciones es relativamente pequeña y principalmente local.
- e. Escasa especialización en el trabajo tanto en el aspecto productivo como en el administrativo.

Actividad no intensiva en capital y este es proporcionado por una o dos personas que establecen una sociedad.

- f. Limitados recursos financieros, en la mayoría de estas empresas el capital de la empresa es suministrado por el propio dueño.
- g. Sus sistemas de contabilidad y de control son elementales.
- h. Cuentan con una estructura organizacional muy sencilla.
- i. En cuanto a tecnología utilizan aquella que se relaciona con el mercado al que abastece o bien tienen una escasa información tecnológica.
- j. La solución de problemas se hace mediante procedimientos de carácter informal yse resuelven conforme se hayan presentado.

#### Principales Problemas Generales Que Enfrentan Las Pequeñas Empresas.

Los principales problemas que enfrentan las pequeñas empresas son muy similares a los que se tienen en las microempresas a un cuando tienen un mayor número de empleados y una estructura más grande, entre estos se encuentran:

- 1.- La falta de experiencia administrativa.
- 2.- No tienen estímulos fiscales.
- 3.- Competencia desleal del comercio informal.
- 4.- La carencia de una estructura administrativa.
- 5.- Falta de financiamiento y experiencia en la actividad económica que desarrollan.
- 6.- Ausencia de controles internos y planeación de sus actividades.
- 7.- La negligencia y el fraude.

Como se puede observar la mayor parte de sus problemas se derivan de la falta de administración, ya que se constituyen sin planeación, sus dueños y personal son ajenos a la administración del giro del negocio, utilizan técnicas y procedimientos obsoletos, la información financiera que utilizan es muy elemental, casi siempre operan con una constante falta de recursos, su compras las realizan con mucha frecuencia a través de intermediarios, no conocen de los apoyos financieros y fiscales que en raras ocasiones les ofrecen las instituciones financieras y las leyes fiscales, y padecen la ausencia de asesoría especializada.

#### Importancia De La Administración Financiera

La administración financiera busca un eficiente manejo de los recursos principalmente del efectivo así como de su rentabilidad. Sus objetivos son la generación de recursos y su eficiencia a través del control de estos, buscando con ello permanecer en operación y maximizar las utilidades de la empresa (Moreno, 2009).Una implementación adecuada de la administración financiera es vital para que las pequeñas empresas puedan alcanzar competitividad, rentabilidad y desarrollo, generar mayores empleos y ampliar su mercado, de lo contrario no podrán desarrollarse y corren el riesgo de no sobrevivir. Por tanto este tipo de administración debe realizarse a través de una adecuada planeación, organización, control y dirección de los recursos financieros con que cuenta la empresa.

Perdomo (2008) refiere que la administración financiera tiene que ver con la obtención de los recursos, pero también con su buen manejo. La clave consiste en cómo se definen y distribuyen las tareas, cómo se definen los vínculos administrativos entre las unidades y qué prácticas se establecen. Asimismo señala que las pequeñas empresas como parte de la dirección financiera deben considerar la planeación financiera y las finanzas a corto plazo y también el financiamiento a largo plazo. Para toda empresa es fundamental la disponibilidad de financiamiento a corto plazo para su funcionamiento. Una administración efectiva de estos financiamientos es vital para mantener un buen el capital de trabajo. Esparza, García, Duréndez & Guillamón (2010) han estudiado la variable de administración financiera través de las dimensiones de financiación, endeudamiento, rentabilidad, crecimiento y utilización de

información contable y financiera. García, Serrano & Blasco M. (2005) han medido la competitividad de las micro y pequeñas empresas a través de las dimensiones de competitividad, capacidad innovadora y productividad.

#### Competitividad

La competitividad es una de las variables mas estudiadas en las pequeñas empresas, la cual es definida como la capacidad que tiene una empresa o país de obtener rentabilidad en el mercado en relación a sus competidores (Gudziol, 1999). Esta se establece en función de la existencia de competidores; consiste en la capacidad de un sector para mantener y aumentar su participación en el mercado, en términos de volumen y/o de ingresos (Chauca, 2000).Corona (2002) define a la competitividad como una variable multifactorial: formación profesional, habilidades administrativas, financieras, laborales y productivas, la gestión, la innovación y el desarrollo tecnológico.

Rubio & Aragón (2002) refieren que la competitividad puede interpretarse como la creación y sostenimiento de un desempeño superior. Por lo cual para que una empresa pueda alcanzar el éxito competitivo dependerá de su capacidad para, rivalizando con otras, conseguir una posición competitiva favorable, mantener y aumentar su posición en el mercado y obtener unos resultados superiores sin necesidad de recurrir a una remuneración anormalmente baja de los factores de producción.En relación a la competitividad este trabajo de investigación busca que las pequeñas empresas puedan tomar decisiones financieras más eficientes que influyan positivamente en su desarrollo, incrementando su competitividad en el mercado; a través de la administración financiera. Autores como Rubio & Aragón (2002) identifican a las variables Formación del gerente, posición tecnológica, calidad del producto, capacidades de marketing, formación de personal, innovación y rentabilidad económica como los factores del éxito competitivo de las pequeñas empresas. En este sentido Calvo, García & Madrid (2004) establecen que las variables para medir los efectos económicos y financieros de las pequeñas empresas son el crecimiento económico, eficiencia, riesgo y rentabilidad.

Otros autores han medido a la competitividad a través de los siguientes indicadores: Chauca (2000)estilo de dirección, tipo de organización, producción, finanzas, tecnología y mercadotecnia. Bonales& Sánchez (2003) calidad, precio, rentabilidad, tecnología, capacitación y canales de distribución. Domínguez, Hernández & Toledo (2004) rentabilidad, prestigio de la empresa y satisfacción del propietario con el negocio. Chávez (2004) calidad, canales de distribución, precio, utilidad servicios y tecnología. Hernández (2006) recursos tecnológicos, recursos humanos, recursos organizacionales y la relación costo-beneficio.Existe una inclinación en la literatura hacia la utilización de indicadores cuantitativos para la medición de la variable de competitividad a través de estándares financieros siendo el indicador más utilizado el de la rentabilidad económica.

#### Variables E Indicadores

Una vez realizada la revisión literaria para analizar la forma en que otros autores han estudiado al objeto de investigación, se determinaron las variables, sus dimensiones e indicadores. Asimismo se analizó la forma en cómo han sido medidas estas variables por otros investigadores. Para esta investigación se ha establecido como variable independiente a la administración financiera y la competitividad como variable dependiente, en virtud de que el enunciado de la hipótesis establece que la administración financiera afecta a la competitividad de las pequeñas empresas comerciales. Se determinó que las dimensiones de la variable de administración financiera serían los recursos financieros y el riesgo. Asimismo se establecieron los indicadores para la dimensión de los recursos financieros siendo estos la información financiera, el periodo con que se elabora la información, la obtención de los recursos financieros y el control de los recursos.Para la dimensión del riesgo se establecieron como indicadores la autonomía financiera, el porcentaje de gastos sobre los ingresos de operación, el costo de los recursos ajenos y la

capacidad de deuda. En cuanto a la variable de competitividad se establecieron las dimensiones de mercado, precio y rentabilidad. Estableciendo como indicadores para la dimensión de mercado el tipo de mercado que atiende este tipo de empresas. En relación a la dimensión de precio se determinó el indicador de establecimiento de precios y por último para la dimensión de rentabilidad se establecieron los indicadores de rentabilidad económica, el margen de ingresos sobre los ingresos de operación, los recursos generados sobre los recursos de operación y la determinación de las utilidades.

# METODODOLOGÍA

La investigación que se está desarrollando es no experimental, con un diseño de tipo transeccional o transversal correlacional. Esta investigación es no experimental en virtud de que no existe una manipulación de las variables, lo cual es una de las características de este tipo de investigación de acuerdo a lo establecido por Hernández, Fernández & Baptista (2006) que definen a la investigación no experimental como cualquier investigación en la que resulta imposible manipular variables o asignar aleatoriamente a los sujetos o las condiciones. Señalando que en un estudio no experimental se observan situaciones ya existentes, no provocadas intencionalmente por el investigador. Asimismo el diseño es de una investigación transeccional o transversal, es decir, los datos se recolectaron en un solo momento, es decir en un tiempo único, con el propósito de describir las variables y posteriormente analizar su interrelación. El diseño es de tipo transeccional correlacional en el sentido de que se busca describir y medir las relaciones entre las variables existentes. En esta investigación las variables a medir son la administración financiera y la competitividad. La metodología empleada para el desarrollo de esta investigación se efectuó en dos etapas, en la primera parte se llevó a cabo la revisión y análisis de bibliografía en libros, revistas, periódicos y documentos electrónicos relacionados con el tema de estudio. En la segunda parte se realizó un estudio de campo, mediante la aplicación de un cuestionario a las personas a cargo de la administración y funcionamiento de las pequeñas empresas comerciales.

*Instrumentos:* El instrumento de medición que se elaboró para medir las variables es un cuestionario con 59 ítems. Lo constituyen en su mayoría preguntas cerradas con respuestas de opción múltiple. Sin embargo aparecen algunas preguntas abiertas como son los datos generales y otras relacionadas con los montos de los ingresos, deudas, utilidades y tasas de interés. Una vez elaborado el cuestionario se reviso por expertos en el área de finanzas y contabilidad, para determinar si los ítems eran adecuados para obtener resultados confiables. Posteriormente se modificaron aquellos ítems a los cuales se le hicieron observaciones, las cuales fueron de forma y no de contenido. Los cuestionarios se aplicaron a los gerentes o dueños de las empresas. Los informantes son personas relacionadas con el tema de investigación conocedoras y con amplia experiencia en la actividad que desempeñan, lo que proporciono validez y confiabilidad a los datos recabados.

*Confiabilidad:* Se determino la confiabilidad del instrumento de medición a través del Alfa de Cronbach. Arrojando un resultado de 0.779 para los ítems que miden la administración financiera y de 0.736 para aquellos que miden la competitividad.

*Población y muestra:* En esta investigación son los empresarios de las pequeñas empresas comerciales los que integran la población. Para determinar el tamaño de la población, muestra y sujetos de este estudio, se tomó como marco muestral la información proporcionada por el SIEM 2012, el cual cuenta con un registro de empresas, clasificadas de acuerdo a su entidad, municipio, tamaño y sector, además de ser el padrón más completo y actualizado que existe hasta este momento sobre este tipo de empresas. De acuerdo con la información del padrón del SIEM en el municipio de Mexicali existen actualmente 413 pequeñas empresas comerciales ubicadas en la zona urbana, las cuales representan la población de esta investigación. Una vez determinada la población y realizado el piloteo del instrumento de medición y establecida su confiabilidad y validez, se procedió a determinar el tamaño de la muestra.

El tipo de muestreo es probabilístico, aleatorio por reemplazo. El muestreo probabilístico se refiere a que cuando se extrae una muestra todos los elementos del marco muestral cuentan con probabilidad de selección distinta a cero. Es decir, todos los elementos de la población tienen la misma posibilidad de ser escogidos. Las muestras probabilísticas son esenciales en los diseños de investigación transeccionales cuantitativos, a través de encuestas, donde se busca hacer estimaciones de las variables de la población y se analizan con pruebas estadísticas, donde se presupone que la muestra es probabilística. Así los elementos muestrales tendrán valores muy parecidos a los de la población, de tal manera que las mediciones del subgrupo pueden dar estimados precisos del conjunto mayor.

Para determinar el tamaño de la muestra se utilizó la fórmula de poblaciones finitas, en virtud que se conoce el número total de pequeñas empresas comerciales registradas en Mexicali, B.C., en el padrón del SIEM 2012.De acuerdo al padrón de información la población de este estudio es de 413 empresas, se consideró un margen de error del .05, un grado de confiabilidad del 95% y una proporción esperada de 0.50. Por lo tanto el tamaño de la muestra para esta investigación es de 200 pequeñas comerciales ubicadas en Mexicali, B.C.

*Descripción de la muestra:* El instrumento del cuestionario se aplica a las pequeñas empresas ubicadas en la zona urbana dedicadas a la actividad comercial, a los propietarios, administradores, contadores o encargados que operan estas empresas ya que son estos quienes tienen el conocimiento y la experiencia de las operaciones, recursos, información y conocen la forma en que se toman las decisiones sobre su funcionamiento. El género de los empresarios no importa y los rangos de edades serán de los 18 a los 70 años.

#### RESULTADOS

A continuación se presentan los principales resultados preliminares obtenidos de la aplicación del instrumento de medición a las primeras sesenta pequeñas empresas. Analizando algunas dimensiones referentes a la administración financiera y competitividad.

Figura 1: Mercado en el que participa



Fuente: Elaboración propia con datos de los resultados

Las pequeñas empresas del sector comercial en Mexicali tienen su potencial de ventas a nivel local representando el 87% de su mercado, debido principalmente a que no cuentan con una estructura financiera sólida.

#### Figura 2: Elaboración de Estados Financieros



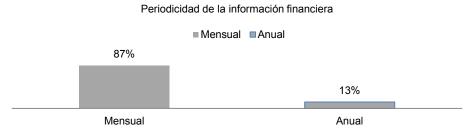
Balance General Estado de Resultados Estado de cambios en la posicion financiera Estado de variaciones en el capital contable Ninguno



Fuente: Elaboración propia con datos de los resultados

En el caso de los tipos de estados financieros que se elaboran, se encontró que el 48% de las empresas encuestadas elaboran el balance general y un 38% el estado de resultados. Siendo que el estado financiero que más información puede brindar sobre cómo están siendo manejados los recursos de la empresa es el estado de cambios en la posición financiera. El resultado obtenido es el reflejo de que la mayor parte de esta información se utiliza sólo para efectos del cumplimiento de las obligaciones fiscales de este tipo de empresas.

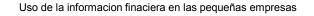
Figura 3: Periodicidad de la información financiera

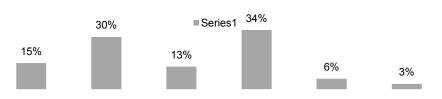


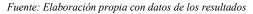
Fuente: Elaboración propia con datos de los resultados

En cuanto a la periodicidad de la elaboración de la información que se genera de las operaciones de la empresa se encontró que es mensualmente como ésta se elabora siendo el caso del 87% de las empresas encuestadas, debido a que tienen que presentar sus declaraciones de impuestos de manera mensual.

Figura 4: Usos de la información financiera en las pequeñas empresas

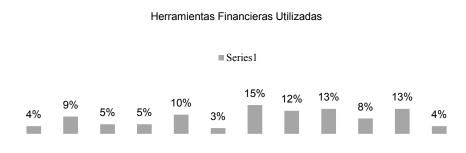






El 34% de estas empresas utilizan principalmente la información que se elabora como resultado de sus operaciones para conocer como se encuentra su situación financiera y un 30% para llevar a cabo el cumplimiento de la declaración de impuestos.

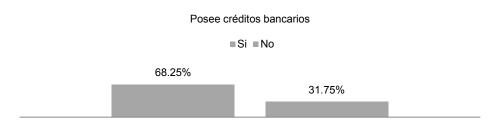
Figura 5: Herramientas financieras utilizadas



Fuente: Elaboración propia con datos de los resultados

En cuanto al tipo de herramientas que se utilizan para analizar la información que producen este tipo de empresas se encontró que es en base a la aplicación de razones financieras en un 15%, a través del control de presupuestos y reportes de inventarios en un 13% respectivamente y en un 12% en base a estadísticos como determinan la situación financiera de la empresa, sin embargo es bajo el porcentaje de las empresas que utilizan estas herramientas. Las pequeñas empresas para el logro de sus objetivos se apoyan poco en el ambiente externo como lo es los indicadores económicos.

Figura 6: Posee créditos bancarios



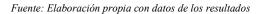
Fuente: Elaboración propia con datos de los resultados

El 68.25% de las empresas utiliza créditos bancarios para su operación en tanto el 31.75% no los utiliza, en virtud de que utilizan a sus proveedores como su fuente de financiamiento.

Figura 7: Tipo de crédito bancario que utilizan

Tipo de crédito bancario que utiliza

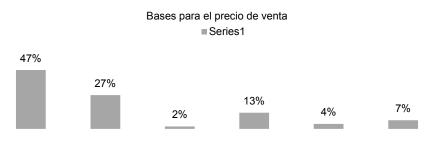
Directo Refaccionario Capital de Trabajo Avío Hipotecario
25%
20%
5%



40%

La fuente de financiamiento principal en un son los proveedores seguido por préstamos personales y créditos bancarios, su principal aplicación en un 32% es para créditos refaccionarios, es decir, para la adquisición de activos fijos seguido en un 25% para cubrir el capital de trabajo de la empresa y en un 18% respectivamente para restructuración de pasivos u otros.

Figura 8: Bases para el precio de venta



Fuente: Elaboración propia con datos de los resultados

En cuanto a la forma en cómo determinan sus precios de venta se encontró que es en un 47% principalmente el costo y el margen de utilidad lo que lo determina, sin considerar los precios del mercado o sus puntos de equilibrio. En virtud de que solo el 27% toma en consideración los precios de la competencia.

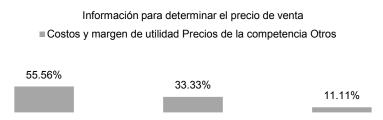
## Figura 9: Control de Efectivo



Fuente: Elaboración propia con datos de los resultados

En cuanto al control de efectivo este se realiza principalmente a través de los reportes periódicos que se realizan de entradas y salidas de efectivo en un 62%. Siendo así estos deberían realizarse con una periodicidad más corta para poder detectar cualquier anomalía en tiempo, solo el 26% lo controla a través de los estados financieros.

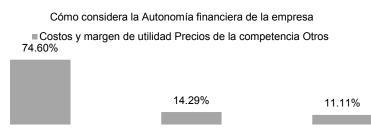
Figura 10: Información para determinar el precio de venta



Fuente: Elaboración propia con datos de los resultados

En relación a la forma en cómo establecen los precios de venta se tiene que el 55.56% lo hace analizando sus costos y el margen de utilidad, en tanto que el 33.33% lo hace tomando como referencia a los precios de la competencia.

Figura 11: Cómo considera la autonomía financiera de la empresa



Fuente: Elaboración propia con datos de los resultados

El 74.6% considera que a su empresa totalmente autónoma en tanto que el 14.29% depende de terceros para su funcionamiento y el 11.11% considera a su autonomía con restricciones.

## CONCLUSIONES

Algunas herramientas de la administración financiera son utilizadas en la pequeña empresa comercial de Mexicali, B.C., sin embargo es bajo el porcentaje de empresas que aplican la administración financiera, el aplicar parcialmente elementos de la administración financiera, provoca no controlar los recursos financieros, afectando la rentabilidad y competitividad de las pequeñas empresas.Razones financieras, presupuestos y control de efectivo no tienen una periodicidad constante en su aplicación, ni paramento u objetivo de comparación. No se consideran indicadores económicos ni se realiza el análisis del entorno, para determinar y cumplir los objetivos de las empresas.

Para determinar el precio de venta se toma como base el costo del producto adicionando el margen de utilidad deseado, sin determinar punto de equilibrio ni considerar el precio de la competencia, esta práctica no es adecuada, ya que el mercado es el que establece los precios, por lo que se debe determinar el punto de equilibrio y controlar los costos.En cuanto a los recursos generados por la operación de las empresas, es necesario buscar formas de obtener mayores recursos, para tener autonomía financiera y no poner en riesgo a la empresa. Elaboración de estados financieros, periodicidad de los mismos, presupuestos, control de efectivo y análisis del entorno, son elementos o variables que debe considerar el modelo de administración financiera. Asimismo determinación de punto de equilibrio, control de costos y generar mayores recursos propios, son elementos a considerar dentro del modelo financiero. Para que el pequeño empresario sobreviva y crezca, es necesario que sea competitivo, y esto implica que trabaje con un método y aplique modelos que le aseguren el logro de los objetivos de la empresa.

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#### RESUMEN

Las Micro, Pequeñas y Medianas Empresas (MPYMEs) constituyen un elemento decisivo en el tejido empresarial, generan empleos, y constituyen una fuente de riqueza inagotable para las regiones y las naciones. Tienen desventajas como la falta de profesionalización en su gestión, y ventajas, sobre todo asociadas a su capacidad de flexibilidad. Se sigue requiriendo de estudios que deriven en políticas y acciones para contribuir a su desarrollo estratégico. La Red FAEDPYME viene desarrollando estudios en esta dirección, en el marco de lo cual esta contribución se propuso como objetivo: Analizar la situación de las MPyMES de Torreón, sus fortalezas y debilidades, así como, realizar comparaciones con los estudios previos en el Estado de Coahuila e Iberoamérica. La metodología aplicada determinó una muestra estratificada en población finita conformada por 113 MIPYMES de una población de 2480. El cuestionario y la estructura de la base de datos en SPSS fueron proporcionados por la Red mencionada y se realizaron análisis descriptivos, ANOVA y Pruebas de hipótesis. Los resultados se analizan y concluyen en cuatro dimensiones: Caracterización de las empresas, expectativas y clima empresarial; Estrategia y Organización; Tecnologías e Innovación; e Indicadores de rendimiento.

**PALABRAS CLAVES:** micro pequeñas y medianas empresas, desarrollo estratégico, clima empresarial, estrategia y organización, tecnología e innovación.

# STRATEGIC ANALYSIS FOR MICRO, SMALL AND MEDIUM ENTERPRISES (MSME): AN EMPIRICAL STUDY IN TORREÓN, COAHUILA, MÈXICO.

## ABSTRACT

The Micro, Small and Medium Enterprises (MSMEs) are a critical element in the business. They create jobs and provide a source of employment for the regions and nations. Have disadvantages as their lack of professionalism in its management and associated advantages especially its capacity for flexibility. Study is still required to advise their policies and actions to strategic development. The Red FAEDPYME been developing studies in this direction. Analyze the situation of this enterprises in Torreón, their strengths and weaknesses, and make comparisons with studies in the State of Coahuila and Iberoamérica is the purpose o this paper. Dimensions: Caracterization and perception of the business environment, strategy and organization, technology, innovation and performance indicators. The methodology determined in a stratified finite population comprised 113 in a population of 2480. The questionnaire and the structure of the database in SPSS were provided by FAEDPYMES. Methodology include descriptive analyzes, ANOVA and hypothesis testing. The results are analyzed and concluded in four dimensions:

Characterization of companies, expectations and business climate, Strategy and Organization, Technology and Innovation, and Performance Indicators.

#### **JEL:** M00

**KEYWORDS:** micro small and medium sized enterprises, strategic development, business climate, strategy and organization, technology and innovation

#### INTRODUCCION

Las MPYME constituyen un foco central de las investigaciones en los últimos años, debido entre otros factores, a su gran capacidad para la generación de empleos y la generación de riqueza. Sin embargo siguen necesitadas de estudios sistemáticos para revelar sus problemáticas y generar estrategias para facilitar la toma de decisiones tanto al interior de las mismas, como a nivel de programas o políticas acertadas y oportunas. (FAEDPYME, 2011) A partir de las orientaciones de FAEDPYMES para continuar en el 2012, la investigación que lidera en este espacio de conocimientos hace varios años, y derivada de la cual, se han generado informes a nivel de estados, de países y de Iberoamérica; la Facultad de Contaduría y Administración, Universidad Autónoma de Coahuila, Unidad Torreón, creó un grupo de investigación formado por Doctores en Ciencias (Catedráticos-Investigadores), y estudiantes del Doctorado y la Maestría en Administración y Alta Dirección, para desarrollar estas investigaciones en armonía con otros proyectos de investigación en curso.

Desde el mes de julio se está aplicando la encuesta en siete municipios representativos del Estado de Coahuila, y conjuntamente se contempla el seguimiento de tres Proyectos de Investigación, con enfoques especializados y una adecuada combinación de técnicas cuantitativas y cualitativas, para revelar con más profundidad, cuestiones relacionadas con: El Modelo de Negocios, Los procesos de Innovación, Gestión Tecnológica, y el Emprendedurismo femenino; en el contexto de las MiPYMEs Coahuilenses y de la Comarca Lagunera. Estos proyectos de investigación que desarrollamos, pretenden a más largo plazo, aportar metodología y resultados en lo concerniente a estudios comparativos regionales, con énfasis en la innovación, un Modelo de Diagnóstico Integral y propuestas de Innovación en el Modelo de Negocio de las PYME, así como un Perfil de la Mujer Emprendedora. En el camino, este resultado de investigación parcial, se enfoca al análisis desarrollado con el procesamiento de la encuesta facilitada por FAEDPYME, para la ciudad de Torreón.

*El objetivo es:* Analizar la situación de las MPyMES de Torreón, sus fortalezas y debilidades, así como, realizar comparaciones con los estudios en el Estado de Coahuila e Iberoamérica, en lo concerniente a la percepción del clima empresarial, su estrategia y organización, tecnologías, innovación e indicadores de rendimiento.

## **REVISIÓN LITERARIA**

Para definir el éxito y la competitividad empresarial se encuentran muchas y diversas posturas en la literatura científica. (Rubio Bañón & Aragón Sánchez, 2002). La competitividad empresarial para las PyMES veracruzanas fue estudiada, entendiendo la competitividad empresarial o éxito competitivo de una empresa como "la capacidad para, rivalizando con otras empresas, conseguir alcanzar una posición competitiva favorable que permita obtener un desempeño superior al de sus competidores". Se establecieron las siguientes hipótesis: "H1: El éxito competitivo de las PYME se ve influido positivamente por las capacidades financieras de la empresa", "H2: El éxito competitivo de las PYME se ve influido positivamente por la posición tecnológica de la empresa", "H3: El éxito competitivo de las PYME se ve influido positivamente por el desarrollo de innovaciones", "H4: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivamente por las capacidades de Marketing", "H5: El éxito competitivo de las PYME se ve influido positivam

PYME se ve influido positivamente por la calidad del producto o servicio", "H6: El éxito competitivo de las PYME se ve influido positivamente por la aplicación de políticas de Recursos Humanos", "H7: El éxito competitivo de las PYME se ve influido positivamente por el nivel de formación del máximo responsable o gerente", "H8: El éxito competitivo de las PYME se ve influido positivamente por las tecnologías de la información y la comunicación en la empresa". (Aragón Sánchez & Rubio Bañón, 2005). Como resultado de la labor que viene desarrollando FAEDPYMES se han obtenido varios Informes. En lo fundamental el Marco teórico se desarrolla por tanto en los mismos. (Análisis Estratégico para el Desarrollo de la Pequeña y Mediana Empres. Estado de Veracruz.), (Universidad Autónoma de Coahuila y FAEDPYMES, 2011), (Análisis Estratégico para el Desarrollo de la MPYME Iberoamérica. 2009. FAEDPYME.) Al interior del análisis de las dimensiones y variables de este estudio se exponen aspectos específicos extraídos de estos informes u otros referentes teóricos expuestos a consideración.

En el Informe de FAEDPYME Iberoamérica 2009, se plantea la clasificación de los factores competitivos en dos grandes grupos: externos (el entorno de actuación de la empresa) e internos (propias de cada empresa); y que por lo tanto se analiza por un lado, la percepción del entorno empresarial; y por otro, una serie de factores relacionados con la estrategia organizativa y los recursos internos: la cooperación entre empresas, los recursos humanos, la innovación y la tecnología, la calidad, las tecnologías de información y comunicación; y los recursos financieros. (Análisis Estratégico para el Desarrollo de la MPYME en Iberoamérica. Informe MPYME Iberoamérica. 2009. FAEDPYME.)

## METODOLOGÍA

La metodología empleada, en lo fundamental, encuesta, estructura de base de datos en SPSS, estadísticos para el análisis, ha sido desarrollada en el marco de los estudios realizados por FAEDPYMES. (FAEDPYME. Fundación para el Análisis Estratégico y Desarrollo de la Pequeña y Mediana Empresa.) Para la definición de la muestra el tamaño de la empresa se ha definido en función del número de empleados generándose tres grupos: microempresas (de 6 a 10 trabajadores), empresas pequeñas (de 11 a 50 trabajadores) y empresas medianas (de 51 a 250 trabajadores). La distribución de la población y la muestra seleccionada se muestran en las Tablas 1 y 2. El cuestionario incluye preguntas cuantitativas y cualitativas, por lo que el tamaño de la muestra asume como criterio de calidad, generalmente aceptado, el control sobre el error máximo a priori en la estimación de la proporción de respuesta a una pregunta dicotómica (frecuencia relativa de respuesta para un ítem de una cuestión con dos posibles contestaciones). El diseño general de la muestra se fundamenta en los principios del muestreo estratificado en poblaciones finitas. La estratificación se ha realizado considerando los 19 sectores determinados en la encuesta utilizada, realizando una agregación con los sectores más representativos (industria, construcción, comercio y servicio) y los tres tamaños anteriormente descritos.

# De ahí que: Margen de error 8%, Nivel de confianza 92%, Universo "población" N = 2480 empresas Nivel de heterogeneidad es del 44%.

El tamaño de la muestra obtenido es de n = 113, el cual representa un 4.56% de cobertura en la población total. La afijación final se realiza de forma proporcional al tamaño de los estratos. En la Tabla 1 puede observarse la distribución de la población y en la Tabla 2, el de la muestra. El número de empresas de la población, para los sectores y tamaños especificados, se ha obtenido de la estadística "Unidades económicas que operaron en 2011 del sector privado y paraestatal" del Censo económico 2012 elaborado por el INEGI. Todas las tablas han sido elaboradas por los autores de este trabajo por lo que no se hará ninguna especificación al respecto.

Pobla	ción	industria	construción	comercio	servicios	total
micro hasta 10	de 6	89	128	902	697	1816
<b>pequeña</b> hasta 50	de 11	99	119	150	162	530
<b>mediana</b> hasta 250	de 51	47	12	56	19	134
	total	235	259	1108	878	2480

Tabla 1: Distribución de la Población de Empresas.

esta tabla muestra la distribución de la población. la cantidad total es de 2480 empresas, donde un 73.22% son micro empresas

La Tabla 1 muestra un total de empresas que se eleva a 2,480 de las que son microempresas un 73.22%, pequeñas empresas un 21.37% y medianas empresas un 5.4%. De esta forma el total de encuestas que fueron muestreadas se elevó a 113. La Tabla 2 muestra la composición final de la muestra. El Sector de Industria tiene el mayor número de empresas en correspondencia con su predominancia en el entramado económico de la región. Las coberturas alcanzadas en función de los agregados por grandes sectores (Industria, Construcción, Comercio y Servicios) y por tamaños (microempresas, pequeñas y medianas) se muestran en la Tabla 3.

Tabla 2. Distribución de la Muestra de Empresas

	MUESTRA		INDUSTRIA	CONSTRUCIÓN	COMERCIO	SERVICIOS	TOTAL
Micro	de 6 hasta 10		17	0	22	17	56
Pequeña	de 11 hasta 50		17	5	8	10	40
Mediana	de 51 hasta 250		8	2	2	5	17
		TOTAL	42	7	32	32	113
	1 1 4	• 1 . •	1 , 1	······································	1 1 70 / 1 .	10 550/	

En la Tabla 2 se observa que el sector industria es el que muestra la concentración más alta con un 37.17% y la micro con un 49.55%

En cuanto a la distribución por sectores y tamaños, la industria tiene mayor cobertura con un 17.87% y la mediana con 12.69 %

## RESULTADOS

*Caracterización de las empresas, expectativas y clima empresarial:* El control mayoritario de las empresas es familiar con un 77.9 %, y el 60.4 % están constituidas en forma societaria. Edad del gerente, mayor porcentaje 48.7 %, edad media de 47 años. Son hombres el 84. 1% de los gerentes y 62.8 % tiene estudios universitarios. Nunca han exportado el 79.4. El comportamiento de estas variables es similar a los estudios previos realizados en el Estado de Coahuila y en Iberoamérica. Diferencias en la exportación, un mayor porcentaje en el estudio iberoamericano. Las empresas torreonenses tienen mucho por hacer en pos de la internacionalización. Se relacionó el Nivel de Formación del Gerente de las Empresas con el tamaño de las empresas la antigüedad y el sector, Nivel significancia de Chi-cuadrado ( $\chi 2$ ) (\* p <0.05 y \*\* p< 0.10). Existe relación con el Tamaño, pero no con la antigüedad ni el sector en el que se desempeñan.

*Estrategia y organización:* Sobre la evolución del empleo, según el tamaño de las empresas hay tendencia creciente de la ocupación entre 2011 y 2012. En las micro y pequeñas empresas es más homogéneo y generalizado. Las micro tienen un crecimiento "relativo" más intenso (tasa media anual 14.28%). El crecimiento del empleo por sectores muestra resultados muy dispares, ya que crecieron el Comercio y la Industria y decrecieron la Construcción y los Servicios. El clima empresarial se percibe igual o en mejoría con respecto al 2011. Se percibe alta competitividad. Los factores que se perciben como más decisivos: Facilidad para que entren nuevas empresas y Poder de Negociación de los Clientes. Influyen menos: Poder de Negociación de los proveedores y Facilidad para crear productos sustitutos.

La Planeación Estratégica muestra un mejor comportamiento en este estudio que el realizado hace 5 años para el Estado de Coahuila (prácticamente lo duplica) y también supera el resultado obtenido en el estudio más reciente para Iberoamérica. Valdría la pena profundizar en futuras investigaciones sobre este aspecto. La planeación a corto plazo es similar a los otros estudios Se generó un proceso estadístico por medio de tablas de contingencia para poder comprobar si impactan en su relación los factores estudiados con la comprobación de la prueba de hipótesis, Nivel significancia de Chi-cuadrado ( $\chi 2$ ) (\* p <0.05 y \*\* p< 0.10). Se demuestra relación entre la planificación estratégica formal con el tamaño de la empresa y la antigüedad, pero no con el sector.

*Tecnología e innovación:* Predomina el Tipo B (que adquieren su tecnología), seguido del Tipo C (Realizan pocas inversiones). Un 38.7% de las empresas son del tipo D (declaran que la competencia tiene mejor tecnología que la de ellos). Solo un 12.6% son del Tipo (ellos desarrollan internamente su propia tecnología). En el análisis por sectores la Industria destaca con un 37.83 % al asegurar que tienen una posición tecnológica fuerte.En cuanto al uso de las Tecnologías de Información y Comunicación, se observan en general altos porcentajes, destaca el correo y la banca electrónicas, la compra y venta por Internet, el trámite de impuestos. Ciertas pruebas estadísticas que hicimos durante la investigación nos sugieren que no necesariamente un alto uso de estas tecnologías demuestra mejoras en el desempeño empresarial. Este constituye un interesante espacio de investigación para trabajos que desarrollaremos en el futuro inmediato.

*Indicadores de rendimiento:* La información contable es alterada por diferentes motivos. Estos estudios utilizan la percepción de los empresarios en relación con su posición competitiva. Pruebas de hipótesis comprobaron que los empresarios no tienen diferencias significativas en la forma en que los empresarios valoran su desempeño con respecto a los competidores. Solo el factor de que la empresa dispone de procesos internos más eficientes tuvo diferencias entre sus medias, con una significancia estadística de (0.015). Por límites de espacio en esta ponencia no se incluyeron otros análisis de la perspectiva económico-financiera que serán presentadas en otras contribuciones.

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# LA CALIDAD Y LA EVALUACIÓN COMO ESTRATEGIA DE MEJORA Y CAMBIO EN LA SOCIEDAD DEL CONOCIMIENTO: ANÁLISIS DE CASOS EN INSTITUCIONES DE EDUCACIÓN SUPERIOR EN EUROPA, AMÉRICA DEL NORTE Y AMÉRICA LATINA

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#### RESUMEN

Como respuesta a las transformaciones y demandas sociales, políticas y económicas, que han afectado a los países del mundo en las últimas décadas, nace la preocupación por "la calidad, la evaluación institucional y los procesos de mejora continua en el ambiente universitario", como un tema de creciente interés que obliga a las instituciones de educación superior a replantear su figura institucional, su rol académico y por ende, a enfrentar nuevos desafíos y cambios en el sistema de educación superior.

PALABRAS CLAVE: Calidad, evaluación institucional, procesos de mejora, cambios, educación superior.

# QUALITY AND EVALUATION AS A STRATEGY FOR IMPROVEMENT AND CHANGE IN THE KNOWLEDGE SOCIETY: CASE STUDIES IN HIGHER EDUCATION INSTITUTIONS IN EUROPE, NORTH AMERICA AND LATIN AMERICA

### ABSTRACT

In response to social, political and economic changes and demands that have affected countries in the world in recent decades, the concern for "quality, institutional assessment and continuous improvement processes in the university" is born as a topic of growing interest requiring higher education institutions to rethink their institutional figure, his academic role and thus to meet new challenges and changes in the higher education system.

**KEY WORDS:** Quality, institutional assessment, process improvement, change, higher education.

**JEL:** H52, H75, I20, I21, I23, I24, I25, I28

## INTRODUCCIÓN

La preocupación por mejorar la calidad en las instituciones de educación superior (IES) ha tenido lugar, por el papel que ella desempeña en el desarrollo social, cultural y económico, que se ha vuelto cada vez más significativo en el contexto de presente mundo globalizado. Es por ello que las IES, están dedicando grandes esfuerzos a planificar, medir y mejorar su calidad. Esta preocupación por la calidad surge entonces desde distintos ámbitos. Es así como los gobiernos requieren información calificada para enfrentar las crisis financieras y económicas, de tal forma que se requiere distribuir los recursos públicos disponibles y velar por su utilización eficaz y eficiente. Las demandas de movilidad obligan a dar cuenta de la calidad de la formación, no sólo en el ámbito local sino también de manera confiable, más allá de las fronteras nacionales. En este sentido, se plantea la necesidad de información para la toma de decisiones, en un contexto caracterizado por asimetrías significativas, lo cual demanda que las universidades den cuenta de la calidad de la formación en distintos programas e instituciones.

A su vez, la sociedad actual exige que se asegure que la oferta educacional es pertinente, desarrollando las competencias requeridas para la formación de capital humano capaz de integrarse en múltiples niveles a una sociedad, denominada del conocimiento. Con el propósito de exponer algunos de los principales desarrollos de los procesos calidad en el sistema de educación superior en un marco global, el presente documento muestra una síntesis de un avance de investigación con una revisión teórica- empírica en el que se incluirá las concepciones de calidad, los mecanismos aplicados al aseguramiento de la calidad en la enseñanza superior y finalmente se muestra una clasificación y análisis comparativo de los procesos de aseguramiento de la calidad en la enseñanza superior usados en los diferentes países de Europa, América del Norte y América Latina. Para terminar se presentan algunas reflexiones a manera de conclusiones.

## REVISIÓN DE LITERATURA

La calidad en la educación es una cualidad que se atribuye a las instituciones para hacer un juicio a partir de un diagnostico que determina la situación real de un curso, un programa, una institución o de sistema educativo. Al respecto varios autores (Woodhouse 2006, El Khawas 1.998, Thune, 1.998) muestran, que si bien los factores que afectan el desarrollo de la educación superior varían de un país a otro, existe un alto grado de coincidencia, determinando como antecedentes comunes aspectos asociados al crecimiento y diversificación de la educación superior, la introducción de elementos de competencia, la lógica del mercado en el sector y la necesidad de responder a los requerimientos de la globalización.

Muchas de las definiciones referidas a calidad de autores como Harvey y Green (1993) y Harvey y Newton (2007) y de la UNESCO según Vlãsceanu *et al.*, (2004) respecto a la calidad en la educación superior se han dado en función de concepciones como el prestigio, la pertinencia, la excelencia. Estas concepciones están ligadas a la evaluación para identificar estándares, criterios, cualidades y requisitos, los cuales pueden variar según el contexto, las orientaciones y necesidades sociales preponderantes en un momento determinado. Para ilustrar estas concepciones se presenta la tabla 1 en la que se incluyen las características del sistema en la educación superior.

En este panorama de la era del conocimiento como lo indican Agasisti (2009), Mintrom (2008) y los estudios de la Organización para la Cooperación y el desarrollo Económico (OCDE) en los últimos 10 años, se forja en el mundo, los perfiles de instituciones de educación superior en un contexto de competencia nacional e internacional en materia de recursos, investigadores y estudiantes. A partir de la conjugación de varios factores internos y externos en las universidades, se ha hecho evidente la necesidad de establecer mecanismos que aseguren los procesos de calidad, que den garantía pública acerca del cumplimiento de los objetivos declarados. La UNESCO recapitula el aseguramiento como un proceso integrador que incluye distintos actores tendientes a mejorar y promoverla calidad de la educación superior. Los mecanismos para el aseguramiento son dispositivos que apuntan al control, la garantía y la promoción de la calidad, los cuales pueden ser públicos y privados. Algunos de estos mecanismos son: la auditoria académica, el licenciamiento, la evaluación institucional, la acreditación.

#### METODOLOGÍA

El objetivo de la investigación implicaba recoger información y desarrollar una reflexión y análisis documental de la literatura científica sobre la temática escogida con una propuesta metodológica enmarcada en una perspectiva teórica. El marco de análisis corresponde a IES de países de Europa, América del Norte y América Latina.

#### RESULTADOS

Aplicando la metodología ya explicada se elabora la tabla 2 para la comparación y análisis de los modelos de calidad de sus diferentes IES, así como los criterios y mecanismos evaluativos utilizados en los procesos de evaluación institucional y de programas académicos estudiados durante el análisis de

literatura. En la tabla 3. Se incluye un análisis comparativo del foco de control, los mecanismos y estrategias utilizadas en las IES de los diferentes países de Europa, América del Norte y América Latina.

Tabla 1: Concepciones de Calidad y características aplicables a la Educación superior

CONCEPCIONES DE CALIDAD	CARÁCTERISTICAS APLICABLES A UN SISTEMA DE EDUCACIÓN SUPERIOR
Calidad como coherencia interna de la	Se contrasta el sistema de indicadores con la misión y los fines de la institución.
institución (ajuste a los propósitos)	
Calidad como relación costo-	Se contrasta el sistema de indicadores con los recursos físicos, humanos y tecnológicos invertidos
beneficio. Valor por su dinero. Da	en la institución
origen al binomio calidad-eficiencia.	
Calidad como pertinencia. Da origen	Se contrasta el sistema de indicadores con la relevancia que tiene la institución con respecto a las
al binomio calidad y pertinencia.	necesidades sociales.
(Contribución, transformación.)	
Calidad como excelencia (concepto	Se contrasta el sistema de indicadores con un ideal de resultados óptimos.
tradicional). Alude un objeto	
intangible, pero que los académicos	
identifican plenamente.	
Calidad como el rendir cuentas-	Se contrasta el sistema de indicadores con una normatividad y estándares previamente establecidos
(accountability). Da origen a sistema	por un organismo interno o externo, de evaluación.
de seguimiento y aseguramiento.	
(Conformidad con las normas).	

En esta tabla se exponen las principales concepciones de la calidad y las características aplicables a cada concepción en el sistema de educación superior. Corresponde a una elaboración propia de la autora, a partir de Harvey y Green (1993), Harvey y Newton (2007) Unesco, Vlãsceanu et al (2004) y el glosario de RIACES.

Tabla 2: Comparación de los procesos de aseguramiento en las instituciones de educación superior	Tabla 2: Comparación de los	procesos de aseguramien	to en las instituciones	de educación superior
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Europa	América del Norte	América Latina
<ul> <li>El modelo general de la evaluación de la calidad utilizado en muchas de las IES en Europa es:</li> <li>. La auto-evaluación de la unidad académica.</li> <li>. Las visitas de campo por expertos externos.</li> <li>. Los informes públicos de evaluación externa.</li> <li>. Europa posee tasas de matriculación y criterios estándar bastante similares a los de Norteamérica (EEUU y Canadá).</li> <li>. Las IES presentan un alto grado de calidad tanto en las instituciones como en los programas académicos</li> </ul>	acreditativa de más de cien años. Sus universidades tienen como objetivo el otorgamiento de la calidad complementado con la revisión. .Dos terceras partes de los sistemas públicos de educación requieren de una evaluación formal de la calidad a nivel de pregrado. .La evaluación se realiza a través de agencias de control de calidad gubernamental o	pioneras en el campo del aseguramiento de la calidad, considerando que con excepción de Estados Unidos, se trata de procesos relativamente jóvenes. En efecto, ya durante la década de los noventa, al menos Chile, Colombia y Argentina y México contaban con procesos en diversas etapas de avance y consolidación. . Con relación a los propósitos de los mecanismos de aseguramiento de la calidad: En la mayoría de los países de América Latina, el fin principal es dar garantía pública de la calidad, mediante la instalación de mecanismos de acreditación de carreras de pregrado y en algunos casos, también de posgrado. . El organismo responsable de establecer estos criterios puede variar, pero en general, en todos los casos participan en dicha

En esta tabla la autora muestra una comparación de los procesos de aseguramiento de las IES según estudios de casos de algunos de los países de Europa, América del Norte y América del Sur. Se identifican las principales características avances y mecanismos de aseguramiento de calidad utilizados en las instituciones educativas de educación superior en los casos estudiados. Tabla 3: Clasificación y análisis comparativo del foco de control, mecanismos y estrategias evaluativas de las instituciones de educación superior.

1º. Países que se distinguen por el desarrollo de estrategias y autorregulaciones y accountability: Donde los sistemas de educación superior están sometidos a "procesos informados y periódicos orientados a ajustar el desempeño del sistema, las instituciones, los programas o procedimientos a las expectativas – estándares, normas – definidas por el regulador a la luz de una evaluación formativa. Las instituciones son esencialmente autónomas, pero operan en un marco que les exige dar cuenta pública de su gestión. Entre estos países se destacan Estados Unidos, con mayor uso de incentivos de mercado, y una regulación estatal relativamente liviana; y Holanda, Bélgica, Canadá, Australia, Nueva Zelandia y el Reino Unido, donde los respectivos gobiernos nacionales son actores centrales en la orientación del sistema.

2ª. Países cuyos gobiernos han iniciado un proceso de descentralización: Se han desarrollado algunos aspectos en esta dirección con la cooperación de las instituciones de educación superior. El ejemplo más claro lo constituyen los países escandinavos, caracterizados por un alto grado de centralización, donde decisiones como los sistemas de admisión, el currículo u otros aspectos se adoptan a nivel gubernamental, pero que se encuentran en transición gradual hacia la autonomía institucional y un mayor compromiso con la autorregulación.

3<sup>a</sup>. Países en que sus gobiernos han anunciado cambios de política orientados hacia el desarrollo de estrategias de evaluación, planificación estratégica o mayor autonomía institucional: Aquí se muestran los países de Europa oriental, enfrentados a la necesidad de modificar drásticamente sus estrategias de gestión pero sin contar con los recursos humanos, materiales o institucionales que les permiten avanzar en la dirección desada. También se incluye en esta categoría a los países de América Latina y Centroamérica, donde las masificación de la educación superior, asociada en muchos casos a un descenso de la calidad, la burocratización de las instituciones públicas y las bajas remuneraciones de los académicos, unidos al peso de las asociaciones estudiantiles y académicas hace necesario introducir cambios importantes en la gestión del sistema. Se destacan los sistemas de evaluación y acreditación, sobre todo en Chile, Colombia, Argentina, México y Brasil.

4ª. Países que se caracterizan por un alto grado de control y planificación centralizados: situación que se da en su mayoría de Europa central: Francia, Italia o Austria. A pesar de la larga tradición centralizada de estos países sobre todo en los europeos, se aprecia también una cierta tendencia a una mayor autorregulación y se están iniciando procesos de descentralización en ámbitos específicos.

Esta tabla muestra una clasificación de las IES en los diferentes países en los que se logran distinguir el desarrollo de mecanismos y estrategias de calidad y evaluación y principales tendencias. Corresponde a un análisis de estudio de Sanyal Bikas (1995) para la Unesco sobre la planificación y mecanismos evaluativos.

#### CONCLUSIONES

Actualmente diversos países de Europa está desarrollando procesos de acreditación que les permitan dar garantía pública de la calidad a la formación de la enseñanza superior en el contexto de movilidad definida para la Unión Europea. En síntesis, hay un claro desarrollo hacia mecanismos que combinan el reconocimiento de que la calidad es responsabilidad de las instituciones de educación superior, con la conciencia de que no es posible dejar la calidad sin un proceso de verificación externa que dé cuenta pública de los resultados obtenidos. Por otro lado Estados Unidos está modificando sus procesos de evaluación y acreditación en la verificación de los propósitos institucionales. En América latina la tendencia es el desarrollo de sistemas integrados de aseguramiento de la calidad, que van en un proceso progresivo en que la mayoría de los sistemas inician su operación con la evaluación y/o acreditación de programas o carreras. Sin embargo, en el proceso se observa la necesidad de ampliar las funciones desarrolladas, y se van agregando mecanismos de control de calidad, licenciamiento o autorización inicial de funcionamiento, o de verificación de existencia de unas condiciones mínimas de operación.

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## RESUMEN

En la actualidad el sector hotelero Mexicano se encuentra ante un escenario muy competitivo a nivel mundial, sin embargo ha presentado una evolución dinámica, donde cada día son más frecuentes las aperturas de hoteles. El presente trabajo describe las tendencias más importantes que ha experimentado el sector hotelero a nivel internacional frente a los retos y oportunidades del entorno económico global. En base a lo anterior se analizan las estrategias que el sector ha realizado por medio de fusiones y adquisiciones del propio sector, la implementación de nuevas formulas de crecimiento a escala internacional, algunas de ellas son: franquicias, contratos, etc., lo anterior es de vital importancia para generar avances tecnológicos, gestión de recursos, comercialización, por último pero no menos importante la internacionalización de sector.

PALABRAS CLAVE: Sector Hotelero, Estrategias, Marketing.

# TRENDS IN THE INTERNATIONAL HOTEL INDUSTRY

## ABSTRACT

Nowadays the Mexican hotel industry is facing a very competitive scenario globally, however presented a dynamic evolution, where are every day more the frequent hotel openings. This paper describes the key trends experienced by the international hotel industry face the challenges and opportunities of the global economic environment. Based on the above analyzes the strategies that the industry has done through mergers and acquisitions in the sector itself, the implementation of new formulas for growth internationally, some of which are franchises, contracts, etc.., This is vital to generate technological advances, resource management, marketing, last but not least, the internationalization of the sector.

**JEL:** G34,L83,M16,M21.

**KEYWORDS:** Hotel Sector, Strategies, Marketing.

## INTRODUCCIÓN

Por varias décadas, el turismo ha tenido un continuo crecimiento y desarrollo hasta convertirse en uno de los sectores económicos que progresan con gran rapidez en el mundo. Es considerado motor de progreso social en diversos países, capaz de atenuar la pobreza y la desigualdad mediante la creación de empresas y nuevos puestos de trabajo. Además, se considera una actividad multidimensional que permite ampliar oportunidades de progreso, distribución del ingreso y uso sustentable de los recursos naturales y culturales (OMT, 2004). El sector hotelero es la base del turismo, la dinámica de las grandes corporaciones se entiende mas por la rentabilidad que promete a los accionistas que por la búsqueda de satisfacción del consumidor (el turista). Las condiciones que habían hecho de la actividad hotelera una profesión individual o familiar hasta principios del siglo XX, se modificaron irreversiblemente con las cadenas internacionales hacia la mitad del mismo siglo, para reconfigurar el comportamiento comercial, laboral y de servicios al huésped. Durante siglos, la hotelería conservó claramente la misma característica: estaba constituida por pequeños negocios independientes dirigidos en familia (Perrin, 1986, pp. 145-146).

El siglo XIX y el inicio del siglo XX estuvieron caracterizados por la hotelería europea, la segunda mitad de este último siglo fue de la hotelería norteamericana y sus formas, que han modelado de manera clara la hotelería como el turismo de la época moderna. En la presente investigación se analiza la evolución de la industria y cómo ésta evolución ha hecho frente a los retos y oportunidades del entorno global, también se reflexiona acerca de la concentración del sector, su flexibilidad y su especialización.

El conocimiento de la estructura del sector hotelero es crucial tanto para el diseño de políticas de las autoridades correspondientes como para definir estrategias empresariales sobre la fijación de precios o los gastos en publicidad y marketing. El objetivo de este artículo es analizar la estructura actual del sector hotelero y su evolución, dando las pautas de su trayectoria futura e identificando las fortalezas y debilidades, para de ésta forma poder crear sinergias eficientes, lo anterior es de vital importancia debido a que el sector exige considerables avances tanto en el servicio como en la infraestructura.

Determinar el tamaño der sector hotelero a nivel mundial y sus principales características es una tarea compleja, al no existir homogeneidad internacional en las propias características de los establecimientos, siempre se han registrado diferencias tanto en tamaño de los establecimientos, cómo en sus servicios. De acuerdo la Organización Mundial del Turismo (OMT), de 1980 a 2007 la capacidad mundial de alojamiento, expresada en número de camas, ha aumentado 78%, al pasar, a una tasa anual media del 3.5,

alojamiento, expresada en número de camas, ha aumentado 78%, al pasar, a una tasa anual media del 3.5, de 16 millones a casi 29 millones de plazas. Para el 2005 se estima que había 15.4 millones de habitaciones en hoteles y establecimientos asimilados en escala mundial, tres millones más que en 1999 gracias fundamentalmente al rápido crecimientos en el Sudeste Asiático.

#### **REVISIÓN LITERARIA**

#### La Estructura Del Mercado Hotelero

De acuerdo con Stabler y Sinclair (1997) establecen las características de los factores económicos fundamentales que conforman el sector hotelero:

- 1. El sector está sujeto al mantenimiento de una capacidad fija de alojamiento que entraña problemas de rigidez en la oferta frente a la oscilación en la demanda, como consecuencia, los altos costos fijos conducen a los operadores a intentar mantener elevadas tasas de ocupación mediante diferenciaciones de productos y segmentaciones de mercados.
- 2. Zhao (1994), establece que algunas formas de alojamiento pueden explotar economías de escala no sólo con sus establecimientos sino también con la gestión de camas en hoteles pertenecientes a terceros. Lo anterior arroja la integración económica horizontal entre empresas da lugar a una reducción de costos fijos y a la creación de barreras a la entrada que posibilitan un incremento en las tasas de ocupación alcanzando nuevos segmentos de mercado.
- 3. Las grandes corporaciones hoteleras, tienden a agruparse en grandes áreas urbanas, los hoteles vacaciones es más probable que sean independientes y se ubiquen de forma dispersa. En este sentido el sector de alojamiento ofrece productos diversificados y se comporta como competencia monopolística, constituyendo la accesibilidad y la complementariedad sus principales rasgos característicos.
- 4. El escenario que emerge del alojamiento vacaciones es el de un sector fragmentado, dominado numéricamente por los negocios de pequeños y medianos, aunque no sea así en términos del valor total de las transacciones del mercado, como resultado de las relativamente bajas barreras de entrada y de la naturaleza de su actividad de servicios intensiva en recursos humanos.

#### Repercusión de la recesión económica de principios de los noventa

El conjunto de los factores externos surgidos en el marco de la crisis económica influyó en el desarrollo e la industria hotelera internacional en la década siguiente, obligando a los agentes a tratar de proteger sus cuotas de mercado ante la significación de los niveles de competencia en todos los segmentos de mercado.

#### Efecto de la globalización en la industria hotelera

El dinamismo que presenta el entorno internacional turístico está impulsado tanto por factores internos, las nuevas tendencias de la demanda y las formulas innovadoras de gestión, como por factores externos destacando el concepto de sostenibilidad, la globalización o el desarrollo de nuevas tecnologías adaptadas a la actividad turística que condicionan a la forma en la que se manifiestan la producción y el consumo turístico mundial (Poon, 2003). La modalidad en la cual las cadenas hoteleras se enlazan con sus operadores nacionales o extranjeros ha tenido cambios desde la década de los ochenta; así la franquicia de servicios, como reservas, programas de marketing o asistencia técnica es uno de los modelos más utilizados, aunque las alianzas estratégicas, los contratos de gestión y los acuerdos técnicos también constituyen estrategias de crecimiento ampliamente utilizadas por la industria hotelera.

Las principales características que rodean las diferentes modalidades de expansión de la industria hotelera mundial, los factores que la inducen a su utilización y las principales ventajas que se derivan de su uso. Crecimiento contractual: franquicia, el contrato de gestión Alianzas estratégicas y coinversiones Fusiones y adquisicionesEl branding se manifiesta en las empresas turísticas para responder a diferentes necesidades; mantener el crecimiento de la compañía en un mercado competitivo, unificar o racionalizar una cadena hotelera inconsistente, alcanzar nuevos nichos de mercado y, sobre todo, conseguir lealtad de marca. En última instancia, Slattery (1991) considera los factores cruciales para definir el nivel de implantación de una marca y la eficiencia de su estrategia depende de tres factores: el grado de desarrollo de mercado hotelero en el país, el impacto de las mayoristas y centrales de reservas y la calidad de la gestión hotelera. Aunado a lo anterior se cuenta con grandes tendencias como la aparición de grandes cadenas internacionales y tendencias marcadas por el turismo.

Actualmente, la presencia de las cadenas internacionales en el sistema turístico global tiene un significado simbólico y de imagen. Y no resulta casual que algunos nombres de la hotelería internacional, como Hilton e Intercontinental, havan servido en la guerra fría a la política de contención comunista durante ese periodo de confrontación política de bloques (Moreno, 1971; Jiménez, 1993). Sus operaciones alcanzan el funcionamiento del sistema en todas las escalas posibles: mundial, regional, nacional y local. La presencia de esas cadenas tiene influencia en los destinos no solo por la recepción de visitantes y su percepción, sino por la conformación de patrones de funcionamiento turístico que son relevantes como impacto en las comunidades receptoras. La dinámica comercial del negocio hotelero a escala internacional es un aspecto relevante de su evolución. Desde los años sesenta (Jiménez, 1993), son frecuentes las fusiones, adquisiciones y otras formas de alianza comercial (como coinversiones). Las estrategias asociadas a esa dinámica obedecen no solo al mercado propiamente turístico, sino también a las condiciones propias del entorno internacional en términos de estabilidad económica y financiera de los países receptores. Las estrategias individuales de las empresas en términos comerciales y financieros del negocio son, a su vez, una función de la capacidad económica y política del país donde reportan impuestos y del marco jurídico específico que les ofrece su actuación, y protección. Es así que el marco regulatorio puede suponer beneficios para las empresas que se acogen a la política económica, fiscal e incluso militar del país en cuestión. Es de consignarse el posible efecto que se tiene en el juicio de satisfacción de los destinos derivado de la distinción del cliente y el beneficiario final de las acciones de la cadena. La OMT reconoce (OMT, 2002a, p. 47) que actualmente, existen dos tipos de personas en la hotelería: a) los hoteleros, y b)

las personas de negocios en el sector hotelero. El primero, el hotelero, orienta sus estrategias de desempeño hacia la satisfacción del cliente, el turista, mientras que el segundo, la persona de negocios en el sector hotelero, adopta decisiones con base principalmente en consideraciones financieras inmediatas, centrándose en la rentabilidad del capital, esto es, en el interés del inversionista, y ello puede tener implicaciones para el desarrollo de los lugares donde se asientan (es decir, los destinos).

El turismo tiene hoy en día una indiscutible relevancia como motor de desarrollo económico y social, generando empleo y riqueza por su fuerte capacidad de arrastre sobre otras actividades productivas. La importancia del turismo sigue una tendencia creciente, como se deduce de las previsiones de la Organización Mundial de Turismo, que vaticina un incremento del turismo en el mundo a índices entre el 5% y el 7% anual, con una previsión en 2020 de 1.600 millones de turistas frente a los 760 millones actuales. El sector hotelero se encuentra dentro de un proceso de transformación en el que su capacidad para innovar y adaptarse a las nuevas condiciones y exigencias del mercado se convierte en uno de los valores y objetivos fundamentales de la organización hotelera. Esta transformación es empujada por tendencias propias del sector turismo en general y otras más específicas del sector hotelero.

#### La incorporación de innovaciones tecnológicas

El progreso tecnológico ha impulsado al menos dos de las tendencias actuales de la industria hotelera mundial. En primer lugar, la concentración de la industria para la consecución de economías de escala y mayores posibilidades de captación de inversiones. En segundo lugar, la creciente aplicación de las tecnologías a los servicios de alojamiento estimula la comentada deslocalización empresarial. El uso de flujos de datos transfronterizos hace más fácil establecer en el extranjero filiales de servicios que se mantengan unidas a su empresa matriz de forma interactiva mediante sistemas de comunicación y computarización transnacionales (UNCTAD, 1999).

El futuro del turismo viene condicionado por la evolución de las tendencias económicas y sociales que están produciendo progresivos cambios en los hábitos y estilos de vida. La rentabilidad y supervivencia de la industria turística depende de la capacidad de adaptarse y anticiparse al nuevo contexto en el que se va encontrar este sector en el futuro próximo. En este sentido, los principales cambios sociales y sus efectos en el sector turístico han sido analizados e identificados por la European Travel Commission.

*Demografía:* El número de personas dentro de la tercera edad tiende a crecer de forma rápida, con lo que cada vez habrá más ancianos viajeros, la oferta turística tendrá que adaptarse a las demandas de este colectivo entre las que cabe considerar medios de transporte más cómodos e infraestructuras, instalaciones y servicios adecuados.

*Salud:* La importancia concedida por la sociedad al cuidado de la salud seguirá aumentando. Esta tendencia afectará, por un lado, a la selección de destinos turísticos, evitando aquellos percibidos como poco saludables.

*Cultura y estudios:* El aumento de los niveles medios de cultura y estudios impulsarán el desarrollo de un papel más importante de los elementos culturales, históricos y artísticos en las demandas turísticas.

*Tiempo de ocio:* Las crecientes presiones en la vida cotidiana de la sociedad moderna estimularán la necesidad de relax y al mismo tiempo conducirán a un recorte de los tiempos de ocio, las tradicionales vacaciones de larga duración serán remplazadas por un mayor número de viajes de menor duración.

*Turistas experimentados:* El turista es un cliente cada vez más sofisticado y más consciente de sus necesidades y derechos, el turista tiene una perspectiva más crítica en cuanto a la calidad y a la relación calidad-precio.

*Tecnologías de la información:* Internet continuará su fuerte penetración dentro del negocio turístico, incrementándose su utilización tanto como canal de información y marketing como herramienta para la comercialización de productos y servicios turísticos.

*Transporte:* la progresiva disponibilidad de trenes de alta velocidad y líneas aéreas de bajo coste está cambiando los flujos turísticos clásicos, muchos destinos se beneficiarán de acceso fácil y a un coste razonable que posibilitará las estancias cortas, lo que conllevará que, para evitar la congestión de las carreteras, disminuya el transporte privado, en especial en temporada alta.

*Sostenibilidad:* la creciente conciencia medioambiental en el ámbito social y empresarial impulsará la demanda de destinos sostenibles, aumentando la importancia de la componente regional de los destinos y la necesidad de mejores políticas de gestión de tales destinos.

*Seguridad:* el terrorismo, la contaminación, las guerras y los desastres naturales son un factor cada vez más importante en la elección de destinos turísticos.

## METODOLOGÍA

Esta investigación se distingue por ser meramente documental para hacer una recopilación de la información existente sobre el sector hotelero a nivel mundial, y elaborar un marco contextual lo suficientemente representativo, por lo tanto la población será la serie de datos e investigación que se localicen respecto al tema. Los datos serán extraídos principalmente de la Organización Mundial de Turismo y de organismos gubernamentales de los países más representativos.

## **RESULTADOS DE LA INVESTIGACIÓN**

Se han analizado las tendencias más significativas que está experimentando la industria hotelera a nivel mundial desde hace más de dos décadas: su acelerado proceso de concentración por medio de fusiones y adquisiciones. El empleo de estos métodos por parte de empresas ha convertido a la industria de alojamiento en escala mundial en el sector más competitivo y ha incrementado su habilidad para atraer inversiones. Cabe mencionar que en un sector tan fragmentado como el hotelero las respuestas de la industria a los cambios en el mercado se manifiestan de forma aislada en función tanto de la intensidad de las presiones competitivas, con la capacidad organizativa de las diferentes unidades, constituyendo las multinacionales hoteleras estadounidenses sus principales protagonistas. Sin embargo, la cada vez más estrecha interdependencia de los comportamientos sectoriales en el ámbito local y el dinamismo que presenta la industria en el mundial, están provocando que dichos factores actúen directamente en la evolución y desarrollo de la industria hotelera mexicana en el cambio de milenio y requiere de ella una restructuración en sus modos de competir, dada la modificación y evolución de las premisas hasta ahora establecidas. Dentro del sector hotelero específicamente, y guardando una estrecha relación con las tendencias generales observadas en el sector turismo en general, las tendencias a las que se enfrenta el sector son fundamentalmente las siguientes:

#### Uso del Internet

Las grandes oportunidades de Internet como herramienta de marketing se basan en la accesibilidad a un número ilimitado de potenciales clientes en mercados dispersos territorialmente y a su capacidad de transmisión de información, todo ello con un coste relativamente bajo frente a las fórmulas tradicionales de marketing. El actual alto grado de disponibilidad de la tecnología en todos los ámbitos induce la necesidad de incorporar nuevas tecnologías en los establecimientos hoteleros (los clientes exigen en los hoteles los mismos sistemas y avances de los que disfrutan habitualmente en sus casas o trabajos).

Los movimientos turísticos tienden a repartirse más homogéneamente a lo largo de los doce meses del año, lo cual contrasta con la situación tradicional en la que existían marcadas puntas de ocupación en ciertos periodos.

En estrecha relación con la tendencia a la desestacionalización de la demanda, se observa una caída progresiva de los tiempos medios de estancia de los turistas en los establecimientos hoteleros.Las aerolíneas de bajo coste han aumentado paulatinamente sus operaciones en España, llegando en el año 2005 a transportar el 31,1% del total de los pasajeros que entran en España. Si bien la disponibilidad de este nuevo medio de transporte ha influido indudablemente en el crecimiento de la entrada de turistas en España, también ha impulsado las inversiones inmobiliarias de turistas extranjeros en España, lo cual está restando demanda hacia el sector hotelero.

#### Búsqueda de la diferenciación

La primera respuesta de gran parte del sector ha sido la entrada en una dinámica de guerra de precios para atraer clientes y conseguir sus objetivos de niveles de ocupación. Sin embargo, está situación no beneficia en absoluto al sector y no se considera sostenible en el tiempo, por lo que la opción competitiva más adecuada en este contexto es la diferenciación de productos y servicios, generando propuestas de valor añadido atractivas para el cliente. Esta estrategia viene avalada por los resultados de un estudio del Cornell Center for Hospitality Research, que demuestra, en base a datos obtenidos entre los años 2001 a 2003 sobre unos 6.000 hoteles, que los que aplican políticas agresivas de reducción de precios, consiguen mayores niveles de ocupación, pero no mayores ingresos por habitación, lo que en definitiva indica la rentabilidad del negocio.

*Externalización de servicios:* El cambio cultural de los clientes, la creciente competencia y otros aspectos que conforman el entorno de continuo cambio que sufre el sector, hace que las empresas hoteleras se centren con mayor empeño en sus competencias básicas, aquellas que les aportan mayor valor añadido. Muchos hoteleros han mostrado un marcado interés por la estrategia de externalización, movidos por la creencia de que en ella pueden encontrar una vía rápida y sin elevados riesgos para mejorar su competitividad. La concentración de los esfuerzos en las áreas que se consideran competencias nucleares del negocio es una tendencia cada vez más visible en este sector.Esta tendencia hacia la externalización se observa más comúnmente en procesos como la limpieza, la restauración o los sistemas de información, aunque son muy diferentes las causas que originan esas decisiones.

*Especialización:* La fragmentación que se viene observando en las motivaciones de la demanda tiene su reflejo en la diversificación de los destinos turísticos. Los hoteles han de ser capaces, cada vez más, de adaptarse a esta nueva situación, ofreciendo servicios especializados y diferenciados, a la vez que son capaces de satisfacer a diversos segmentos de demanda. Prueba de ello son las tendencias identificadas en un informe publicado por PricewaterhouseCoopers en junio de 2006, en el que se observa una creciente y profunda segmentación del mercado hotelero, con la aparición de nuevas oportunidades de negocio y nuevos tipos de clientes, además de una mejor definición y mayor segmentación de las nuevas marcas hoteleras.

*Nuevas tecnologías:* Las empresas hoteleras lideran la introducción y aplicación de las tecnologías dentro del sector turístico en general, ya que es donde se aplican con mayor intensidad, llegando ya a ser un requisito mínimo para los clientes.Su papel principal es el de mejorar la gestión interna del hotel con la correspondiente mejora de la eficiencia y productividad. Destacan por ser utilizadas de forma más generalizada las soluciones avanzadas de telefonía, los call center y los servicios personalizados por medio de plataformas de comunicación centralizadas. Pero a éstas habría que añadir otras herramientas aparecidas en entornos poco o nada relacionados con el sector hotelero que se han sabido adaptar adecuadamente: es el caso de Internet, el diseño de redes de comunicación o los servicios hotspots

(puntos de acceso inalámbrico). Paralelamente, se aprecia una incursión de las tecnologías orientadas a la sostenibilidad, que tiene su reflejo en iniciativas como las certificaciones en normas medioambientales (ISO 14001) de Fuerte Hoteles o la instalación de paneles térmicos para el ahorro energético de HUSA Princesa. Los clientes demandan mayores esfuerzos y acciones por un desarrollo sostenible, y por otro, los turoperadores negocian sus contratos favoreciendo a los establecimientos que respetan más el entorno.

#### Capital humano

Quizá no como una tendencia nueva pero sí como un aspecto fundamental dentro del sector hotelero cabe mencionar la importancia de las personas y su influencia en cada una de las tendencias anteriores. Se debe recalcar de manera especial la dependencia que mantienen las empresas hoteleras con los departamentos de recursos humanos y cómo éstos son los principales responsables de lograr unos índices satisfactorios de calidad en el servicio. Las capacidades de las personas en los hoteles normalmente constituyen un activo que se ha ido acumulando de forma lenta, por lo que se ha convertido en un aspecto básico para lograr ventajas competitivas sostenibles. Aumentar los conocimientos y las capacidades de las personas a través de la formación adecuada y fomentar su compromiso y satisfacción con el hotel es más que una necesidad para las empresas de este sector, y más todavía cuando el grueso del personal empleado responde a un perfil de baja cualificación.

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## RESUMEN

El enfoque de género constituye una construcción social que implica romper tradiciones de discriminación social hacia la mujer y la construcción de espacios para su realización plena, en el entorno personal y social. En este sentido, en las últimas décadas han tomado los estudios sobre la violencia y en menor medida los referidos al empoderamiento económico. Por ello, la investigación tiene como objetivo: Contrastar el perfil de las mujeres emprendedoras de las ciudades de Torreón y Saltillo, México. Las dimensiones analizadas fueron: Emprendedoras-Características en Coahuila. Demográficas, Entorno y Organización, Indicadores o Desempeño Económico e Indicadores o Aspectos Motivacionales y Sociales. La indagación empírica abarcó una muestra de 66 y 29 mujeres emprendedoras de las MIPYME en Torreón y Saltillo, Coahuila, respectivamente. Entre los resultados de la comparación de los perfiles de las mujeres emprendedoras en ambas ciudades, procesados en SPSS, se evidencia un predominio de la conjunción de motivos para emprender un negocio (Necesidad y oportunidad), mayor concentración en los sectores de comercio y servicios, y más del 75 % de las mujeres con dependientes económicos. Sin embargo, en Saltillo el promedio de edad y estudios universitarios (40 años y 48%) es menor que en Torreón (47 años y 68%).

PALABRAS CLAVES: enfoque de género, emprendedurismo, empoderamiento económico.

# WOMEN ENTREPRENEURS: SIMILARITIES ANDDIFFERENCES BETWEENCITIES OF TORREONAND SALTILLO, COAHUILA."

## ABSTRACT

The gender perspective is a social construction which involves breaking traditions of social discrimination against women and creating opportunities for fulfillment in personal and social environment. Thus, in recent decades have made studies on violence and to a lesser extent those relating to economic empowerment. Therefore, the research aims: To compare the profile of women entrepreneurs in the cities of Torreon and Saltillo, Coahuila, Mexico. The dimensions were analyzed: Entrepreneurs-Demographic Characteristics, Environment and Organization, and Economic Performance Indicators or Indicators or motivational and social aspects. The empirical research among a sample of 66 and 29 women entrepreneurs of MSMEs in Torreon and Saltillo, Coahuila, respectively. Among the results of the comparison of the profiles of women entrepreneurs in both cities, processed in SPSS, a preponderance of evidence is a combination of reasons for starting a business (Need and opportunity), greater focus on trade and services sectors, and over 75% of women with dependents. However, the average age Saltillo and university studies (40 and 48%) is lower than in Torreon (47 and 68%).

KEY WORDS: gender, entrepreneurship, economic empowerment.

JEL CODE: L 38

## INTRODUCCION

Este estudio es continuidad de la investigación que ya fue aceptada para publicar en el 2012 con la construcción de un perfil de la mujer emprendedora en Torreón, Coahuila, México. (Guerrero Ramos, L. 2013). Pretende sistematizar y actualizar este perfil de modo comparativo con la ciudad de Saltillo, capital del Estado de Coahuila. Por ello los objetivos que se proponen son los siguientes:

- 1- Determinar las características fundamentales sociodemográficas de las emprendedoras en estudio.
- 2- Identificar relaciones de estas emprendedoras con el entorno.
- 3- Analizar los factores relacionados con la empresa, características propias de la organización creada, las formas de propiedad, estrategias administrativas, objetivos empresariales y resultados.

Los resultados aquí obtenidos revelan aspectos que no eran conocidos sobre las emprendedoras en Torreón y en Saltillo, por lo que los mismos se muestran en lo adelante, en la siguiente estructura: una Revisión literaria para mostrar los antecedentes bibliográficos más significativos localizados, la metodología empleada, la caracterización obtenida en las siguientes dimensiones de análisis: la emprendedora (individuo)", "el entorno", los estudios enfocados a nivel de la "organización", y finalmente el "proceso" de creación de la empresa; las Conclusiones, Limitaciones y Referencias Bibliográficas.

## **REVISIÓN LITERARIA**

En las últimas décadas se observa un incremento de la atención hacia los problemas de la mujer y en los esfuerzos para mejorar la situación de discriminación sufrida durante siglos. En particular nos ocupan los estudios dirigidos a la participación de las mujeres en las actividades productivas, concretamente su papel como emprendedora de nuevos negocios. En México, en noviembre del 2003, se efectuó el Primer Encuentro Nacional de Mujeres Empresarias, organizado por el Instituto Nacional de las Mujeres (INMUJERES). En ese marco se aplicó un cuestionario a 178 mujeres provenientes de todas las zonas del país, aunque con predominio de la zona centro (64.6%). Algunos de los resultados de este estudio revelan: la mayoría de las empresas (41 %) en el sector servicios, seguidas por el comercio (27 %); predominio de las mismas, solo un 13.9 % fue heredada de los padres; el motivo predominante para emprender es por necesidad (42 %). La mayoría de las empresarias declaró ser socia de su empresa (55 %) sobre todo con socios familiares, mientras que un 45 % son propietarias únicas de su empresa.

(Instituto Nacional de las Mujeres. México.) En España, por ejemplo, las Cámaras de Comercio, la Fundación INCYDE y el Instituto de la Mujer, con el apoyo del Fondo Social Europeo, parten de que catorce de cada cien mujeres ocupadas (en un trabajo remunerado) ha creado su propio puesto de trabajo, su propio negocio, para hacer un profundo análisis de los obstáculos que enfrentan las mujeres a la hora de crear sus empresas, su perfil, las diferencias de género y las políticas de apoyo. (Cámaras de Comercio. Fundación INCYDE. Servicio de Estudios., 2007 Un interesante estudio de la investigadora Lidia Heller, publicado por la CEPAL, examina las continuidades y transformaciones en la participación de la mujer latinoamericana en actividades productivas, en un sentido amplio: se incluyen pequeñas y medianas empresas (PYME) y micro emprendimientos. Entre las conclusiones de su estudio se destaca que la información presentada confirma que las tasas de participación de mujeres en el mercado laboral se han incrementado durante la última década en la mayoría de los países de la región, sin embargo persiste la segregación por género en ocupaciones de baja productividad. Ellas siguen concentradas mayoritariamente, en áreas de la economía informal, como el trabajo doméstico, trabajo familiar no remunerado, ocupaciones que ofrecen un empleo precario, de baja calidad, irregular o sin remuneración, por lo cual tienen escaso o nulo acceso a la seguridad social o a la protección social. Es aún muy escasa la proporción de mujeres empleadoras en la mayoría de los países de la región.

(Heller, 2010) Otras investigaciones han estado encaminadas a identificar características y competencias de las mujeres empresarias en un afán por construir perfiles en distintos contextos y atendiendo a diferentes variables. Así por ejemplo, un estudio en Méxicoseñala las siguientes características y competencias asociadas: Compromiso (Estrategia empresarial orientada a la organización y relaciones más que a las innovaciones tecnológicas y tendencia a buscar más la cooperación que la competencia), Participación (Trabajo en equipo), Intuición (Visión), Creatividad (Capacidad de planificación y Flexibilidad), Adaptabilidad (Capacidad para balancear tareas y actividades), Reflexión (determinación en la toma de decisiones), Actitud oportuna (Facilidad para la comunicación interpersonal), Independencia (Liderazgo), Trabajadora (Negociación y comunicación efectiva y Búsqueda de la eficacia y la eficiencia), Seguridad en si misma e independencia (Gran capacidad para delegar autoridad y tolerancia a la frustración).(Romo Rojas, Suárez Salazar, & Llamas Batres, 2007)

Un perfil de mujeres emprendedoras en Argentina se centra en determinar para mujeres exitosas el grado de existencia de las siguientes características personales: autoeficacia, foco de control, necesidad de logro, así como la presencia y grado de participación de mentores en el desarrollo personal y profesionales; y variables culturales. (Rábago, D'Annunzio, & Monserrat). En Chile, plantean que la experiencia, la propiedad y el tipo de emprendimiento que poseen actualmente (capaz de explicar un 21, 93 % del perfil) pone de manifiesto la existencia de mujeres con alta experiencia en labores de emprendimiento; las características sociodemográficas (capaz de explicar un 13,69% del perfil presenta a las mujeres con alto nivel socioceonómico y educacional sobre 30 años de edad y casadas, participando activamente en emprendimientos; educación, edad y jefatura de las emprendedoras (capaz de explicar un 11,59 % del perfil) muestra dos perfiles opuestos; y la educación, región y afiliación a grupos y sociedades (capaz de explicar un 9,93 % del perfil) también muestra dos perfiles antagónicos.

(Pizarro S., Amorós E., Guerra G., & Leguina R., 2009)En México, en noviembre del 2003, se efectuó el Primer Encuentro Nacional de Mujeres Empresarias, organizado por el Instituto Nacional de las Mujeres (INMUJERES). En ese marco se aplicó un cuestionario a 178 mujeres provenientes de todas las zonas del país, aunque con predominio de la zona centro (64.6%). Algunos de los resultados de este estudio revelan: la mayoría de las empresas (41 %) en el sector servicios, seguidas por el comercio (27 %); predominio de las microempresarias (55 %), cuatro de cada cinco empresas creadas por mujeres fueron fundadas por ellas mismas, solo un 13.9 % fue heredada de los padres; el motivo predominante para emprender es por necesidad (42 %). La mayoría de las empresarias declaró ser socia de su empresa (55 %) sobre todo con socios familiares, mientras que un 45 % son propietarias únicas de su empresa. (Instituto Nacional de las Mujeres. México.) Ese estudio refiere el Perfil de la Mujer Empresaria en México construido por Gina Zabludovski. (Zabludovski, 1993). Al referirse al incremento de la participación de la mujer en los puestos directivos, esta autora plantea que en la década de los 90, se observó un avance significativo en la presencia de mujeres como funcionarias del sector privado y público, ya que éste aumentó del 14.8 % en 1991, a 19,6 en 1995, y a 24.6 % en el año 2000. (Zabludovski, Las mujeres en los cargos de dirección en México.)

## METODOLOGÍA

Este es por esencia un estudio exploratorio y descriptivo, que utiliza fundamentalmente el método cuantitativo. El análisis documental de estudios previos constituye la base para analizar y sistematizar los precedentes de esta investigación, en los aspectos teórico y metodológico. Para la investigación empírica, mediante la recolección de información y su posterior análisis, se hicieron algunas adaptaciones a un Cuestionario validado en una tesis doctoral defendida en ESADE, titulada: "Factores que influyen en las nuevas empresas creadas por mujeres", el que se muestra en el Anexo 1. (Valencia Silva) Como guía para las características de las emprendedoras ("femaleentrepreneurship") se utilizó el mismo método que Valencia Silva, quien se apoya en el Modelo de creación de empresas de GarTner en las dimensiones: "la

emprendedora (individuo)", "el entorno", los estudios enfocados a nivel de la "organización", y finalmente el "proceso" de creación de la empresa. (Valencia Silva M. M.)

Se aplicó el cuestionario en forma de entrevista a 66 empresarias en Torreón y 29 en Saltillo, tratando de tener representatividad de los sectores industrial, comercial y de servicios. Para el procesamiento y obtención de gráficos univariados se utilizó el Excell. Posteriormente se exportó esta base de datos al software IBM SPSS Statistics 19, a fin de recategorizar los datos y realizar otros análisis estadísticos. En particular para el análisis de Resultados, de los 15 indicadores que califican en "éxito" o que afectan los resultados de las nuevas empresas creadas por mujeres emprendedoras, se utilizó el método de regresiones lineales para las variables continuas – familia, resultados de las empresas y objetivos empresariales. Para las variables dicotómicas – plan de empresa, experiencia profesional e instituciones externas-- se usaron los métodos no-paramétricos de Kolgomorov-Smirnov, la cual es una prueba de bondad de ajuste y sirve para contrastar la hipótesis nula de que la distribución de una variable se ajusta a una determinada distribución teórica de probabilidad.

#### **RESULTADOS Y DISCUSION**

Los resultados se muestran en el extenso en las cuatro dimensiones establecidas por el Modelo de Gartner: la emprendedora (para el que se establece la comparación entre las ciudades de Saltillo y Torreón, el entorno, la organización y el proceso de creación de la empresa. La Tabla 1 muestra la comparación del comportamiento de las características observadas en la dimensión Emprendedora, en las dos ciudades objeto de análisis, Saltillo y Torreón.

Tabla 1: Resumen del perfil de las Mujeres Emprendedoras en Saltillo y Torreón, Coahuila, México. Dimensión EMPRENDEDORA.

CARACTERISTICA	SALTILLO	TORREÓN
EDAD PROMEDIO	Promedio de edad – 40	Promedio de edad – 47
		77 % de 31 a 55, 33 % de 40 a 47 años
	69 % de 31 a 55, 14 % de 24 a 31 años, 14% más de 55.	
EDUCACION	48 % tiene estudios universitarios, superando los niveles	68 % tiene estudios universitarios,
	de comportamiento de los países de altos ingresos.	superando los niveles de comportamiento
		de los países de altos ingresos.
MOTIVACIONES	Predomina en un 41 % la conjunción de motivos, seguido	Predomina en un 47 % la conjunción de
	de la Oportunidad (31 %)	motivos, seguido de la Necesidad (27 %)
SECTOR DE SUS EMPRESAS	Comercio (39 %), Servicios (25 %), 36 % (Industria)	Servicios (41 %), Comercio (33 %)
DEPENDIENTES	El 76 % de las mujeres emprendedoras tienen	El 77 % de las mujeres emprendedoras
ECONÒMICOS	dependientes económicos. (Hijos menores o mayores de	tienen dependientes económicos. (Hijos o
	edad)	familiares)

Esta Tabla comparativa del emprendedurismo femenino entre las ciudades que se analizan, destaca diferencias en el promedio de edad, la educación, y similitudes en las Motivaciones para emprender un negocio y los dependientes económicos.

#### CONCLUSIONES

No hay estudios recientes en México para definir ni sistematizar un perfil de la mujer emprendedora. Los antecedentes encontrados establecieron en 1993 un perfil a partir de un cuestionario aplicado a 178 mujeres emprendedoras, mayoritariamente del centro de México, que asistieron al primer Encuentro de Mujeres Emprendedoras. Los resultados mostrados en esta ponencia fueron obtenidos de dos muestras intencionadas en las ciudades de Torreón y Saltillo. Este trabajo partió de breves modificaciones al cuestionario validado en una tesis doctoral defendida en ESADE, que replica la metodología de Gartner, y se obtienen valiosos resultados en aras de construir de manera más sistematizada, un perfil de la mujer emprendedora en Coahuila, México.

#### Limitaciones

Para buscar generalizaciones se requiere ampliar las muestras de forma probabilística por sectores, abarcando otras ciudades del estado, lo que continuaremos realizando como parte del proyecto de investigación que estamos desarrollando. No obstante los resultados aquí expuestos son de gran utilidad, ya que Saltillo es la capital del estado y Torreón una de sus ciudades de mayor desarrollo. Por otra parte se corrobora un comportamiento, en general coincidente con otros estudios previos analizados.

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## RESUMEN

En este trabajo se observan las prácticas de Orientación al Mercado que llevan a cabo las empresas comerciales de la región de San Quintín en específico las llamadas comúnmente "supermercados". Por medio de entrevistas con clientes de los supermercados y microempresarios de la región de recabó información cualitativa. En esta región la mayoría de los microempresarios tienen una administración empírica y lo que se investigó es si ellos sin saberlo han aplicado técnicas de orientación al mercado. Se buscó conocer si la aplicación de las microempresas a la orientación al mercado de manera empírica es lo que las ha ayudado. Sin embargo se cree que ahora que la región está en desarrollo una administración empírica ya no será suficiente y los microempresarios deberán esforzarse mucho más para lograr tener relaciones a largo plazo y de fidelidad con sus clientes lo que los llevara a consolidarse como microempresarios exitosos.

PALABRAS CLAVE: Orientación al mercado, ventaja competitiva, Mercadotecnia.

# MARKET ORIENTATION APPLIED IN BUSINESS ENTERPRISES OF SAN QUINTÍN VALLEY. B.C.

## ABSTRAC

In this paper we observe the practices of market orientation conducting commercial enterprises in the region of San Quintín specific commonly calls "markets". Qualitative information was obtained using the interview technique, applied to supermarket customers and micro entrepreneurs of the locality. In this region most microentrepreneurs have an empirical administration and an investigation does not know if they have applied these techniques of market orientation and this is what has led them to stay. However, now that the region is developing empirical administration will no longer suffice and microentrepreneurs need to do much more to achieve having long-term loyalty with your customers to take them to emerge as successful entrepreneurs.

JEL: D12, D22, M31

KEYWORDS: Market Orientation, Competitive advantage, Marketing.

## INTRODUCCIÓN

Las empresas comerciales de zonas rurales no han mostrado interés por realizar sus prácticas de negocios con Orientación al Mercado (OM), lo que las ubica en una situación grave. Muchas personas han decidido optar por establecer un negocio en la región ya sea porque han notado una falta de oferta de productos en su localidad o por la necesidad de obtener un ingreso para su familia. El problema es que en la mayoría de los casos estos negocios se han desarrollado de manera cien por ciento empírica, es decir, los microempresarios no tienen una formación administrativa y muchas veces no consideran que el cliente

sea lo más importante para que su negocio prospere. Actualmente han estado llegando algunos comercios nuevos de cadenas nacionales, los cuales han provocado cambios en las rutinas de compra de las familias de la región. Esto es únicamente un llamado de atención para todos aquellos comerciantes que no se han preocupado por cubrir las necesidades de sus clientes, desde brindarles un servicio agradable y de excelente calidad. Esta investigación analiza información cualitativa, obtenida de una serie de entrevistas, tanto de los microempresarios como de los clientes para saber que opinan ambos y comparar los resultados de sus respuestas. De este modo se pretende demostrar que la orientación al mercado es un arma que crea una fuerte ventaja competitiva para cualquier negocio.

## **REVISION DE LITERATURA**

La teoría de orientación al mercado ha sido descrita por varios autores. Para esta investigación tomaremos como referencia los aportes descritos por Slater & Narver (1995) quienes afirman que la orientación al mercado es un enfoque que da respuesta a tres procesos: a) Tomar continuamente información de los clientes, sus necesidades y deseos así como las capacidades de la competencia para cubrir dichas necesidades y deseos, b) comunicar la información obtenida a todos los integrantes de la empresa y c) coordinar esfuerzos de la compañía para generar una oferta que sea atractiva y represente un valor agregado a los clientes potenciales. Durante mucho tiempo, los académicos han puesto su atención en lo importante que es, aumentar el grado de orientación al mercado de las empresas para así poder obtener una ventaja competitiva que les genere mayores resultados económicos (Armario, 2003). Actualmente ante la globalización y los cambios en el ambiente externo altamente competitivo las organizaciones se han visto en la necesidad de orientarse al mercado y buscar clientes para elevar su rentabilidad y lograr obtener una ventaja competitiva que pueda permanecer durante años (Valenzuela & Torres, 2008).

En la investigación realizada por Kumar, Jones, Venkatesan, & Leone (2011), se examinó la naturaleza evolutiva de una relación de mercado del rendimiento de orientación de negocio. Ellos evaluaron los efectos de la OM (durante 9 años) en un número considerable de empresas y se demostró que las empresas orientadas al mercado tuvieron un efecto positivo en las ventas tanto a corto como a largo plazo. La importancia del concepto de la OM en el marketing es en la actualidad incuestionable. Sanzo, Santos, Vazquez & Alvarez (2003), han revisado en los últimos años las áreas más importantes de investigación de mercadotecnia y opinan que la OM está por encima de las demás en cuanto a su importancia para la empresa. Es por ello que el empresario debe considerar que "la orientación al mercado es un objetivo de toda la organización, superando con ello un enfoque exclusivamente funcional, vinculado al departamento de marketing, y adquiriendo una dimensión estratégica" (Bello, Polo & Vázquez, 1999, p. 190).

Refiriéndonos a la ventaja competitiva, Porter (2006) aseguró que una empresa tiene ventajas competitivas sobre la competencia cuando su rentabilidad está por encima de la rentabilidad media de las actividades según el sector en el que se encuentra. Porter (2006) menciona que, para que algo se considere como ventaja competitiva, ésta debe ser realmente efectiva, debe ser difícil de imitar, única, posible de mantener, superior a la competencia y que se pueda utilizar ante los distintos cambios que pueden suscitarse en el entorno. En el caso de San Quintín es muy fácil identificar cuáles son los mercados a los que más acuden las familias locales y por lo tanto se asume que ellos son quienes mantienen mayores grados de rentabilidad en la región.

#### METODOLOGIA

Esta investigación se realizó en el Valle de San Quintín. Éste lugar se encuentra en el Estado de Baja California. San Quintín está localizado dentro del área del municipio de Ensenada, a 78 km del sur de la cabecera Municipal. En este lugar predominan algunas de las actividades primarias como lo es la agricultura, ganadería y acuacultura. Sin embargo, en el Valle de San Quintín existen muchos tipos de negocios del área comercial. Ésta investigación se centra en los supermercados que están ubicados desde

el Poblado de Camalú hasta el Ejido el Papalote, quedando estos dentro del Valle de San Quintín. Como se mencionó anteriormente, las empresas seleccionadas fueron supermercados, siendo estas empresas comerciales de venta al por menor. Como características para su selección como parte de la muestra fue considerado que se encuentran registrados como supermercados y que estos tengan al menos 3 empleados. En cuanto a los clientes se seleccionaron amas de casa con años de experiencia en el tema de las compras en supermercados. Se realizó una extensa búsqueda de información respecto a la Orientación al Mercado y la Competitividad. Para poder explicar ambos constructos se buscaron distintas definiciones utilizadas desde las más antiguas hasta las creadas últimamente. Lo anterior fue con el fin de analizar la evolución de ambos conceptos y conocer la influencia de la orientación al mercado sobre la competitividad de los negocios. Para realizar las entrevistas se elaboraron dos guías de entrevista, una para los empresarios y otra para los clientes. Ambas guías de entrevista contenían quince preguntas abiertas. El objetivo era conocer los puntos de vista de los entrevistados y se les dio la oportunidad de opinar libremente. Se buscó con ello tener información sobre los posibles cambios que se presentan tanto para el empresario como para el cliente con motivo de la llegada de nuevos supermercados. Las respuestas de los en entrevistados fueron en su mayoría cualitativas y esto se clasificó y se concentró en un cuadro de elaboración propia para su interpretación.

#### RESULTADOS

Con esta investigación se identificaron las técnicas utilizadas por los microempresarios para que sus negocios crezcan. También se identificaron los motivos por los cuales los clientes siguen realizando sus compras en los negocios tradicionales y cuáles son los motivos por los que algunos de los residentes del Valle de San Quintín ya han modificado sus hábitos de compra acudiendo a los supermercados nuevos. Con la investigación se logró conocer el punto de vista tanto de los empresarios como de los clientes y con la información obtenida se hicieron comparaciones para determinar si los microempresarios realmente conocen a sus clientes o si solo creen conocerlos. En las entrevistas con expertos de la región por parte de los microempresarios se puede resaltar que ellos están muy seguros de la fidelidad de sus clientes por la relación de años que existe entre cliente-empresario.

Ellos consideran que su mayor fortaleza es esa. Además, están convencidos de que los clientes tienen mayor libertad de opinar debido a la una relación que existe entre ellos y sus clientes. Los microempresarios también consideran que cuentan con todos los productos que las personas de la comunidad necesitan comprar; consideran que las promociones que brindan a sus clientes son suficientes y creen que sus empleados tratan muy bien a sus clientes.Sin embargo, por parte de los clientes se notó que ellos han encontrado algunos beneficios en los nuevos supermercados y algunos han decidido no dejar de ir a su viejo supermercado pero también compran algunas cosas en los supermercados nuevos. De la información recabada se puede comentar que en los nuevos supermercados existen productos diferentes que los otros no tienen. Los nuevos supermercados cuentan con mayores descuentos en productos, preguntan periódicamente que productos necesitan comprar los clientes, cuentan con espacios adecuados para estacionamiento, las presentaciones de algunos productos son mas prácticas y novedosas (como las carnes) y los clientes consideran que si hay variaciones en los precios.

#### CONCLUSIONES

Con las entrevistas realizadas se pudo observar que los microempresarios y los clientes tienen puntos de vista muy diferentes de los negocios comerciales. Los microempresarios no deben confiarse solo en las buenas relaciones que tienen con sus clientes. También deben pensar en agregar valor a sus productos mediante el buen servicio al cliente. Algunas sugerencias de los clientes entrevistados son: los supermercados tradicionales ya no cuentan con espacios suficientes, en su momento fueron construidos para una población más pequeña y no tienen instalaciones suficientes para atender a la demanda actual. Los clientes consideran que durante muchos años ellos han comprado productos en supermercados que no regresan nada a la comunidad, que no ofrecen servicios adicionales y además de que no se preocupan por lo que sus clientes necesitan. Las personas de San Quintín han opinado que si a la región llega un

supermercado amplio, con diversidad de productos y buenos precios ellos dejarían de comprar donde lo hacen actualmente porque no se sienten comprometidos a seguir haciendo sus compras en el mismo lugar. Esto nos dice que no existe una fidelidad de los clientes y que si estos acuden al mismo lugar es porque no hay uno que cubra las expectativas de los clientes.

San Quintín es un lugar en desarrollo, hasta el momento la mayoría de los comercios son creados y manejados por personas de la misma comunidad pero ya en estos momentos existen algunas cadenas de supermercados nacionales llegando a la región y se pronostica la llegada de muchos más. Por el momento los empresarios deberían comenzar a preocuparse por conocer muy bien las necesidades de sus clientes, deben saber lo que los clientes buscan y sobre todo deben ofrecer un valor agregado a sus productos. Sin duda es un reto como micropresarios salir de su zona de confort y dejar de hacer las cosas como las ha hecho durante muchos años, pero deben comprender que es necesario innovar para sobrevivir y comenzar por la aplicación de técnicas de marketing con orientación al mercado sin duda ayudará a generar una fuerte ventaja competitiva frente a su competencia presente y futura.

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# IMPACTO DE LA DIVULGACIÓN DE INFORMACIÓN FINANCIERA EN INTERNET DE LAS EMPRESAS EN AMÉRICA LATINA

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#### RESUMEN

En el actual contexto económico, la divulgación de información que dé cuenta de las actividades de las empresas ha tomado gran importancia dentro del mundo empresarial, de tal manera que diversos autores han evidenciado en sus estudios empíricos que una adecuada política de transparencia informativa se relaciona positivamente con la reputación de la empresa, ejerciendo una influencia significativa sobre su valoración. El objetivo que se plantea en este trabajo es analizar las prácticas divulgadas on-line de información tanto financiera como no financiera mediante la aplicación de in índice de divulgación en internet, utilizando como población objeto de estudio las empresas latinoamericanas no financieras que cotizan en un mercado secundario organizado. Los resultados obtenidos hasta la fecha parecen poner de manifiesto en términos generales que el nivel de divulgación es menor en los países emergentes que en los países desarrollados.

PALABRAS CLAVE: Divulgación, transparencia, gobierno corporativo, responsabilidad social, mercados emergentes

### IMPACT OF DISCLOSURE OF FINANCIAL INFORMATION IN LATIN-AMERICAN COMPANIES

#### ABSTRACT

In the current economic environment, disclosure of financial information has became important, several authors have evidenced in their empirical research that an appropriate transparency policy of information is positively related with firm reputation. The main purpose of this work is to analyze the disclosure of information on-line through the development of an index of disclosure, considering non financial public Latin American companies. Results confirm the level of disclosure is lower in emerging capital markets than in developed capital markets.

**JEL:** M10, M14

KEYWORDS: Disclosure, transparency, corporate government, social responsibility, emerging markets.

#### INTRODUCCIÓN

En un mercado globalizado como el actual, se hace cada vez más necesario suministrar e intercambiar información empresarial, lo que ocasiona que las empresas se relacionen con un mayor número de agentes económicos, tales como sus propietarios, inversionistas, clientes, acreedores financieros y el mismo Estado. La información financiera de una empresa que cotiza en Bolsa adquiere atención especial porque incrementa el número de propietarios, y por tanto usuarios de la información. En este contexto, "una sociedad que recurre a los mercados de valores como fuente de financiación busca recursos financieros

provenientes de inversores individuales e institucionales", por tanto, las empresas deben ganar y mantener la confianza de los inversores (Tua *et al.* 2003:55). Por consiguiente, la transparencia en la información es importante no únicamente porque incrementa la eficiencia en la asignación de recursos, sino porque puede ayudar a asegurar que los beneficios del crecimiento sean distribuidos y no capturados por la alta dirección (Bellver y Kaufmann, 2005), constituyendo además un eje rector del buen funcionamiento de los mercados nacionales e internacionales.

Lo anterior supone la necesidad de tener un conocimiento de la empresa bajo distintos aspectos financieros y no financieros. Por tal motivo, el Internet se ha convertido en una herramienta fundamental para el desarrollo empresarial de las organizaciones y en los últimos años las empresas están utilizando intensivamente Internet como medio de comunicación con los distintos grupos de interés para la revelación y divulgación de información tanto financiera como no financiera. De acuerdo con lo anterior, el principal objetivo de nuestro estudio es examinar las prácticas de divulgación de información por parte de las empresas pertenecientes a los diferentes países latinoamericanos seleccionados. Como medida del tipo y cantidad de información divulgada por la compañía a través de su página Web desarrollamos un Índice de Divulgación en Internet (IDI). Por otro lado, analizaremos la relación existente entre el índice de divulgación de Internet (IDI) y las características propias de las empresas, tales como la rentabilidad, sector y tamaño, entre otras.El trabajo se estructura cuatro apartados. En el primero de ellos se realiza una revisión bibliográfica en relación con la divulgación en Internet. En el apartado dos se manifiestan las hipótesis planteadas. En el apartado tres encontramos la metodología y por último, el apartado con los resultados y conclusiones.

#### **REVISIÓN LITERARIA**

La evolución de Internet ha creado nuevas vías para la divulgación de información corporativa, ya que disminuye el tiempo e incrementa la eficiencia en los costes de la divulgación de información. El beneficio también es importante para los usuarios de la información financiera (socios, inversores potenciales, etc), quienes mitigan substancialmente los costes de obtener dicha información (Patten, 2002).Cada empresa tiene diferentes políticas y prácticas para la divulgación de informes financieros en Internet, suponiendo un problema la falta de regulación sobre los contenidos a divulgar y el formato o modelo de presentación de los informes digitales periódicos (Westartp y Boss, 1998). Estudios como los de Jones et al. (1999); Isenmann y Lenz (2001); y Mendes da Silva y Christensen (2004) han evaluado recientemente esta problemática. En América Latina, los informes financieros y ambientales disponibles todavía son dominados por las publicaciones impresas, pero hay una fuerte tendencia en el uso de Internet. Sin embargo su uso en la mayoría de las páginas Web corporativas se limita a los recursos y contenidos más básicos como la dirección de contacto para los inversores, listas de correos, noticias destacadas, etc. Así, la opción de enriquecer la relación con el inversor a través de conferencias o presentaciones en formato audio y video y la participación en línea en las Juntas de Accionistas, es rara vez encontrada (Deller et al. 1999). Estudios previos se han centrado en identificar la influencia de las características específicas de la compañía, tales como el tamaño, rentabilidad y desarrollo en el nivel y la naturaleza de la divulgación corporativa (Hossain et al. 1995; Chen et al. 2002; o Debreceny et al. 2005, entre otros). Sin embargo, la influencia de estos determinantes específicos sobre los efectos de la divulgación ha recibido poca atención en el mercado de capitales.

#### Tamaño De La Firma y Divulgación

De entre las características analizadas, el tamaño de la compañía es la que arroja una evidencia mayor respecto a su asociación con el nivel de divulgación de la empresa. En este sentido, Atiase (1985) concluye que el tamaño de la empresa es un indicador de la riqueza de la divulgación de información debido a que las grandes firmas reciben más cobertura que las pequeñas. Así son numerosos los estudios que han evidenciado una asociación significativa entre divulgación y tamaño (Ashbaugh, *et al.* 1999; Craven y Marston, 1999; Brennan y Kelly, 2000; Ettredge *et al.* 2002; Marston y Poley, 2004; Bonsón y Escobar, 2004; Debreceny *et al.* 2005) entre otros.

H1: La cantidad de información divulgada en la web de la compañía está positivamente relacionada con su tamaño.

#### Sector De La Empresa

Asimismo, se muestra una relativa semejanza en la información facilitada dentro de determinados sectores de actividad tales como el sector de tecnologías y comunicación, farmacéuticas y energía, gas y agua. (Debreceny *et al.* 2005; Oyelere *et al.* 2003; Bonsón y Escobar, 2004; Olea de Cárdenas, 2004; Xiao *et al.* 2004).

H2: El sector en que la empresa opera está asociado con el nivel de información proporcionada a través de Internet.

*Rentabilidad:* Sin embargo, para características como el apalancamiento, rentabilidad, estructura de propiedad de la compañía, la asociación no es tan clara (Ashbaugh *et al.* 1999 y Brennan y Kelly, 2000). Generalmente se acepta que las empresas con beneficios presentan un mayor nivel de divulgación de información. De manera contraria, Chen *et al.* (2002 demuestran que la divulgación de los estados financieros es más común en las empresas que reportan pérdidas.

H3: La rentabilidad de una empresa esta asociada con la divulgación de información financiera en el Internet.

*Endeudamiento:* Mientras algunos estudios revelan una relación positiva entre divulgación de información voluntaria y nivel de endeudamiento de la empresas (Mitchell *et al.* 1995 y Hossain *et al.* 1995), un gran número de trabajos evidencian una ausencia de relación o una asociación significativa pero de signo contrario a lo esperado (Chow y Wong-Boren, 1987; McKinnon y Dalimunthe, 1993; Hossain *et al.* 1994; Ho y Wong, 2001; Ferguson *et al.* 2002).

H4: El endeudamiento de una empresa está asociado con la divulgación de información financiera en el Internet.<sup>2</sup>

*Localización geográfica:* Debido a las peculiaridades que se derivan de la economía de cada país, la localización geográfica de la empresa es una de las variables consideradas tradicionalmente para explicar la información suministrada por cada una de las empresas (Gray, 1988; Craven y Otsmani, 1999; Gray *et al.* 1995). Aunque este estudio se refiere a las empresas latinoamericanas, éstas compiten en un mercado global, con importantes diferencias culturales entre los países (Hofstede, 1991, 2001) por lo tanto, se puede argumentar que la información proporcionada por las sociedades en forma voluntaria en Internet depende de la cultura de los países.

H5: La localización geográfica de las empresas está asociada con el nivel de información proporcionada a través de Internet.

#### METODOLOGÍA

#### Muestra

Con la finalidad de contrastar las hipótesis señaladas se ha utilizado una muestra que está constituida por empresas que cotizan en los mercados más desarrollados de Latinoamérica. Concretamente los países seleccionados son Argentina, Brasil, Chile y México. Para la selección de las empresas utilizamos la lista de empresas cotizadas centrándonos en aquellas que pertenecen al índice más representativo de dichos mercados. Posteriormente se retiraron las compañías pertenecientes al sector financiero y de seguros, quedando una muestra final de 135 empresas. Se ha seleccionado esta muestra por tratarse de un conjunto de grandes compañías, las más significativas de los mercados bursátiles de los países de la muestra. Su estudio nos permitirá obtener conclusiones sobre el conjunto de las empresas más significativas y con mayores incentivos para llevar a cabo una política de divulgación voluntaria de información. Por último, los datos financieros necesarios para realizar el analisis fueron obtenidos de la base de datos

#### Economática.

**ELABORACIÓN DE ÍNDICE DE DIVULGACIÓN EN INTERNET (IDI)** Con el fin de elaborar el Índice de divulgación para el estudio, se han tomado como punto de partida diversos trabajos que analizan la cantidad de información proporcionada por las empresas corporativas en sus páginas web tales como, Deller *et al.* 1999; Pirchegger y Wagenhofer, 1999; Ettredge *et al.* 2001 y 2002; Gandía, 2002; Larran y Giner, 2002; Bonsón y Escobar, 2004; Marston y Polei, 2004; Mendes-da-Silva y Christensen, 2004; Xiao *et al.* 2004; Spanos, 2006 y Andrikopoulos y Diakidis, 2007; entre otros.

La metodología utilizada en la mayoría de trabajos sobre divulgación consiste en la elaboración de índices de información o transparencia que permitan cuantificar la cantidad de información que proporcionan las empresas a través de Internet. Ello conlleva la identificación de aquellas variables que componen el índice, es decir, los contenidos informativos que van a ser analizados y evaluados, para, una vez definidas las variables, decidir la formulación que ha de adoptar dicho índice y los valores que podrán tomar las variables. Por lo tanto, la elaboración de índices constituye una de las ramas del análisis de contenido, constituyendo una de las técnicas básicas para el estudio de la información suministrada por las compañías (Ortiz y Clavel, 2006), así como para evaluar la transparencia informativa de las empresas en determinados sectores y países (García-Meca y Martínez, 2004; Bonsón y Escobar, 2004).

La mayoría de los índices utilizados en la literatura empírica de divulgación consideran el alcance o cobertura como un indicador de calidad de la divulgación. Por tanto, para definir el índice de este estudio nos hemos decantado por el Índice de alcance, y hemos agrupado en tres bloques aquellas cuestiones que consideramos relevantes para que cualquier usuario potencial de las páginas web pueda formarse una opinión fundada acerca de la información proporcionada por las empresas a través de las mismas, esto es, Información contable y financiera (ICF), Gobierno corporativo y Responsabilidad Social (GCYRS) y Información de contacto, navegabilidad, diseño y accesibilidad de la página Web (INDA). En este estudio, se ha optado por variables dicotómicas para los ítems determinados.

Las empresas de Brasil tienen en promedio un índice mayor de divulgación de información, tanto en total como en gobierno corporativo y accesibilidad. México tiene un promedio superior en divulgación de información contable y financiera, sin embargo presenta un resultado inferior en gobierno corporativo con relación a los demás países al igual que las empresas chilenas. En el caso de Argentina tiene una calificación buena tanto en IDI, GCYRS e INDA.

PAÍS	SECTOR	IDI TOTAL	ICF	GCYRS	INDA
	Industrias básicas	56.57	90	24.44	68.88
México	Bienes de consumo	54.63	78	30.95	64.88
Mexico	Energía				
	Información, tecnología				
	Industrias básicas	72.37	79	56.29	87.03
D	Bienes de consumo	69.23	79	51.79	82.69
Brasil	Energía	78.04	75	68.33	92.70
	Información, tecnología				
	Industrias básicas	51.35	57	40.00	61.11
	Bienes de consumo	58.55	63	44.44	72.22
Argentina	Energía	60.81	65	60.00	58.33
	Información, tecnología,				
	Industrias básicas	51.08	59	39.33	59.16
CL 1	Bienes de consumo	52.31	63	38.09	61.30
Chile	Energía	52.97	74	34.66	58.33
	Información, tecnología,	54.05	50	33.33	83.33

Tabla 1: Promedios de IDI por sector industrial y país

#### Modelo Explicativo Propuesto

Para realizar el contraste conjunto de las hipótesis planteadas realizamos un análisis de regresión múltiple. Se ha empleado este método para evaluar la dependencia global de la variable Índice de Divulgación en Internet (*IDI*), Índice de Información Contable y Financiera (*ICF*), Índice de Gobierno Corporativo y Responsabilidad Social (*IGCRS*), Índice de Navegación, Diseño y accesibilidad (INDA) a un conjunto de variables independientes. Basándonos en la evidencia previa, la relación entre la variable dependiente y nuestro conjunto de variables independientes que representan el Tamaño (*InSIZE*), la Rentabilidad (*ROE*), el sector (*SECT*) y el país de origen de la empresa (*PAIS*) queda definida de la siguiente manera:

$$IDI_{i} = \delta_{0} + \delta_{1}InSIZE_{i} + \delta_{2}ROE_{i} + \delta_{3}END + \delta_{4}SECT + \delta_{5}PAIS_{i} + \xi \quad (1)$$

$$ICF_{i} = \delta_{0} + \delta_{1}InSIZE_{i} + \delta_{2}ROE_{i} + \delta_{3}END_{i} + \delta_{4}SECT_{i} + \delta_{5}PAIS_{i} + \xi \quad (2)$$

$$IGCRS = \delta_{0} + \delta_{1}InSIZE_{i} + \delta_{2}ROE_{i} + \delta_{3}END_{i} + \delta_{4}SECT_{i} + \delta_{5}PAIS_{i} + \xi \quad (3)$$

$$INDA_{i} = \delta_{0} + \delta_{1}InSIZE_{i} + \delta_{2}ROE_{i} + \delta_{3}END_{i} + \delta_{4}SECT_{i} + \delta_{4}PAIS_{i} + \xi \quad (4)$$

#### **RESULTADOS**

La estimación de las regresiones la realizamos por *Mínimos Cuadrados Ordinarios*. Se contrasta la hipótesis de homoscedasticidad por medio de la prueba de White, así mismo se verifica que no se presenta multicolinealidad perfecta. Los resultados derivados de la estimación del modelo 1 propuesto aparecen reflejados en la *tabla 2*. La significatividad global de dicho modelo (R<sup>2</sup>ajustado) es del 16.7%, por lo que se puede decir que las variables *InSIZE, ROA, END, SEC y PAIS* explican casi el 18% de la varianza de la variable dependiente *IDI*. En relación a los valores del estadístico "*t*", de las cinco variables seleccionadas en el modelo, sólo las variables InSIZE y PAIS muestran un efecto significativo.

IDI	$f_{1} = \delta_{0} + \delta_{1} InSI$	$ZE_i + \delta_2 ROE_i + \delta_2 ROE_i$		$EC_i + \delta_5 PAIS_i$	+
Variable		Variables	Coeficiente	T-stat	Sig.
dependiente		independientes			-
•	H1	ÎnSIZE	2.353	2-167	-0.033
	H2	ROE	-0.014	-0.113	0.910
IDI	H3	END	-0.037	-0.429	0.669
	H4	SECT	3.637	1.841	0.069
	Н5	PAIS	-3.201	-2.571	0.012
$R^2 = 0.167$	$R^{2}$ ajust= 0.123	F=3.802	P = 0.003		

Tabla 2: Resultados de la estimación de la ecuación 1

En la *tabla 3* presentamos los resultados derivados de la estimación de la ecuación (2) en la que la variable dependiente es el Índice de Contenido Financiero *(ICF)*. Se observa que la significatividad global de dicho modelo es del 29%, sin embargo solo la variable país tiene un efecto significativo en la divulgación de información financiera.

Tabla 3: Resultados de la estimación de la ecuación 2

Variable		Variables	Coeficiente	T-stat	Sig.
dependiente		independientes			
	H1	ÍnSIZE	1.886	1.401	0.164
	H2	ROE	0.144	0.951	0.344
ICF	H3	END	-0.146	-1.355	0.179
	H4	SECT	0.753	0.307	0.755
	H5	PAIS	-7.859	-5.092	0.000
$R^2 = 0.290$	$R^2$ ajust= 0.253	F=7.766	P = 0.000		

En la *tabla 4* presentamos los resultados derivados de la estimación de la ecuación (3) en la que la variable dependiente es el Índice de Gobierno Corporativo y Responsabilidad Social (*GCYRS*). La significatividad global obtenida en el modelo es del 7.5% encontrando que las variables no son estadísticamente significativas.

Tabla 4: Resultados de la estimación de la ecuación 3

GC	$YRS_i = \delta_0 + +\delta_1 In$	$SIZE_i + \delta_2 ROE_i$	$+\delta_2 END_i + \delta_4 S$	$SEC_i + \delta_5 PAIS_i$	$+\xi$
Variable		Variables	Coeficiente	T-stat	Sig.
dependiente		independientes			•
	H1	ÎnSIZE	1.442	0.958	0.341
	H2	ROE	0.030	0.175	0.861
GCYRS	H3	END	0.025	0.208	0.831
	H4	SECT	5.908	2.156	0.034
	Н5	PAIS	0.773	0.448	0.655
$R^2 = 0.075$	$R^2$ ajust= 0.062	F=1.533	P=0.187		

Los resultados de la ecuación 4 se presentan en la tabla 5. La variable dependiente Índice de Navegación, Diseño y accesibilidad (INDA) es explicada en un 19.5% por las variables independientes, de las cuales el tamaño y el país son significativas y tienen un impacto positivo en la divulgación.

Tabla 5: Resultados	de	la	estimación	de	la ecuación 4
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			2 EN 6 2 6		8
IN	$DA_i = \partial_0 + + \partial_1 InS$	$SIZE_1 + \partial_2 ROE_1 + \partial_2 ROE_2$	$+ \partial_2 END_1 + \partial_4 SI$	$EC_1 + \delta_5 PAIS_1$	$+\xi$
Variable		Variables	Coeficiente	T-stat	Sig.
dependiente		independientes			•
1	H1	InSIZE	3.882	2.787	0.006
	H2	ROE	-0.199	-1.275	0.206
INDA	H3	END	-0.025	-0.222	0.825
	H4	SECT	3.203	1.263	0.210
	H5	PAIS	-4.287	-2.683	0.009
$R^2 = 0.195$	$R^2$ ajust= 0.153	F=4.613	P = 0.001		

Con el fin de analizar el impacto que tiene la divulgación de información en internet en la percepción del inversionista, se consideró la siguiente ecuación:

$$MV_i = \delta_0 + \delta_1 IDI_i + \delta_2 ICF_i + \delta_3 GCYRS_i + \delta_4 INDA_i + \xi$$
<sup>(5)</sup>

En donde se considera como variable dependiente el valor de mercado de la empresa (MV) medido por el precio de la acción al 31 de marzo de 2012. Como variables explicativas consideramos los índices propuestos anteriormente: IDI, ICF, GCYRS e INDA.

Los resultados se presentan en la *tabla 6.* La variable dependiente valor de mercado (MV) es explicada en un 13.3% por las variables IDI, ICF, GCYRS e INDA. Las variables que presentan un impacto significativo en la percepción del inversionista son IDI y GCYRS.

Tabla 6: Resultados de la estimación de la ecuación 5

Variable	Varial	oles	Coeficiente	T-stat	Sig.
dependiente	independ	ientes			e
1	IDI		0.484	2.721	-0.008
	ICI	7	-0.141	-1.816	0.073
MV	GCY	RS	0.196	2.721	0.008
	IND	A	-0.097	-0.829	0.409
$R^2 = 0.133$	$R^2$ ajust= 0.107	F=4.977	P = 0.003		

#### CONCLUSIONES

Las empresas pertenecientes a los mercados emergentes empiezan a utilizar sus páginas web para distribuir información contable y al mismo tiempo revelar información voluntaria de carácter empresarial. Lo anterior no sólo por razones de imagen sino también para satisfacer las crecientes demandas de información por parte de los inversores, mejorando tanto la cantidad como la calidad de la información suministrada. Una limitación potencial de este estudio que utiliza un índice de divulgación para investigar el nivel del mismo en las empresas es que los resultados son únicamente validos en el grado que el índice de divulgación utilizado sea el apropiado, puesto que la selección de los aspectos incluidos en el Índice de Divulgación de Internet *(IDI)* propuesto y la clasificación del mismo, inevitablemente implica subjetividad y aunque hemos tratado de reducirla no puede eliminarse por completo.

Además, podemos mencionar que otra limitación en la investigación es que la muestra no fue seleccionada al azar. Debido a la dificultad de reunir datos en los países emergentes nos hemos abocado a seleccionar las empresas que cotizan en la bolsa de valores de los países seleccionados y concretamente, las que pertenecen a los índices bursátiles de mayor capitalización.Podemos asumir que los resultados obtenidos se deben a que las empresas seleccionadas son empresas de características similares ya que todas cotizan en bolsa y son de gran tamaño, por lo que en futuros trabajos analizaremos en profundidad cada uno de los países con empresas más dispares, teniendo en cuenta variables como cotizadas o no cotizadas, grandes y pequeñas, las firmas de auditoría, etc.

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# METODOLOGÍA PARA LA IMPLEMENTACIÓN DE LA NORMA OHSAS 18001 EN PYMES

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#### RESUMEN

Las pequeñas empresas generalmente no cuentan con los recursos económicos para pagar una consultoría en el área de la seguridad industrial. Esto implica que el manejo de la seguridad al interior de la organización se convierta en un problema para el empresario o en una oportunidad de mejoramiento. En este trabajo se presenta una metodología de apoyo para garantizar la implementación de la norma OHSAS 18001 en los pequeños negocios. El primer paso fue realizar un diagnóstico a partir de una línea base conformada por indicadores de gestión organizacional. Posteriormente se diseñó una ruta de consultoría para llegar a la certificación. Conforme a los resultados del diagnóstico la empresa conoce sus debilidades y elabora un plan de construcción de los documentos e implementación de acciones de mejora. Los resultados obtenidos a partir de esta metodología, muestran que el 80% de las empresas lograron obtener la certificación OHSAS 18001 utilizando este procedimiento.

PALABRAS CLAVES: Seguridad Industrial, OHSAS 18001, Calidad, Salud Ocupacional, HSE

# METHODOLOGY FOR THE IMPLEMENTATION OF OHSAS 18001 IN SMES

#### ABSTRACT

Small businesses generally do not have the money to pay a consultant in the area of industrial safety. This implies that the management of security within the organization to become a problem for the employer or an opportunity for improvement. This paper presents a methodology of support to ensure the implementation of OHSAS 18001 in small businesses. The first step was to make a diagnosis from a baseline consisting of organizational performance indicators. Subsequently consulting designed a route to reach certification. According to the diagnostic results the company knows their weaknesses and develop a plan of construction documents and implementing improvement actions. The results obtained from this methodology show that 80% of companies achieved OHSAS 18001 certification using this procedure.

**JEL:** L11, L14, L19, L29, L69, L91, M14, M41, O18, R41

KEYWORDS: Industrial Safety, OHSAS 18001, Quality, Health Safety

#### INTRODUCCIÓN

Las pequeñas empresas generalmente no cuentan con los recursos económicos para pagar una consultoría en el área de la seguridad industrial. Esto implica que el manejo de la seguridad al interior de la organización se convierta en un problema para el empresario o en una oportunidad de mejoramiento. En este trabajo se presenta una metodología de apoyo para garantizar la implementación de la norma OHSAS 18001 en los pequeños negocios. El primer paso fue realizar un diagnóstico a partir de una línea base conformada por indicadores de gestión organizacional. Posteriormente se diseñó una ruta de consultoría para llegar a la certificación. Conforme a los resultados del diagnóstico la empresa conoce sus debilidades y elabora un plan de construcción de los documentos e implementación de acciones de mejora. Los

resultados obtenidos a partir de esta metodología, muestran que el 87% de las empresas lograron obtener la certificación OHSAS 18001 utilizando este procedimiento.

Esta investigación tiene la siguiente organización. En la sección de revisión de la literatura se plantean los argumentos que sustentan la construcción de la línea base y las herramientas para el mejoramiento empresarial. Posteriormente se presenta la metodología utilizada, en donde se describe como se seleccionó la muestra, el procedimiento para la elaboración del diagnóstico y la implementación de la norma OHSAS 18001. Posteriormente se presentan los resultados de la investigación. Finalmente, las conclusiones y limitaciones.

#### **REVISIÓN DE LITERATURA**

En el mundo los profesionales de diferentes áreas se han interesado por diseñar metodologías que les permitan elevar su competitividad. En el tema de la implementación de la norma OHSAS 18001 existen empresas dedicadas a la consultoría e implementación de la norma. La norma OHSAS 18001 se deriva de la ISO 9001 en la parte de seguridad industrial (Ziebell, 1999). Redinger y Levine (1998) analizaron la administración de programas de seguridad y salud ocupacional en 22 instituciones entre públicas y privadas. Walker y Smith (2002), describen en su articulo que fallar no es una opción, por lo cual los sistemas de seguridad deben estar construidos de la mejor manera. Rash (1995) expone que el costo de minimizar el riesgo en las organizaciones es mucho menor al costo que se debería pagar por un accidente, esto aumenta las ganancias (Koelsch, 2000). En el 2003 los empleadores gastaron 50.8 billones de dólares en gastos médicos de los trabajadores (Hansen, 2006). Dyjack et al. (1998), Markey (1999), Uzumeri (1997), Levine (1997) y Mansdorf (1996), comparan la norma ISO 9001 y la OHSAS 18001 en términos de complementariedad y similitud, concluyendo que si se implementa la primera, la segunda es más rápida de documentar. También argumentan que puede darse una estandarización para la implementación en cualquier empresa. Beohm (1998) ha abordado el problema de la seguridad industrial desde el diseño de la maquinaria, de tal manera que se minimice el riesgo de accidente.

Redinger y Levine (1998) diseñaron una metodología para comparar los sistemas de seguridad industrial en el mundo y dedujeron que siguen patrones parecidos conectados a los procesos gerenciales en las organizaciones, lo cual respalda la generalización de una metodología como la planteada en este trabajo. Oktem et al. (2004) argumentan que una empresa que sea sostenible implementa normas de seguridad y salud ocupacional, además esto se relaciona con su éxito en el mercado (Strasser, 2003).

Loebbaka (2008) concluye en su artículo que se necesita no solo implementar la norma, sino que funcione en la realidad, lo que llama Bennett (2002) efectividad, tema que estudia también Fulwiler (2006). . Gerhardsson (1998) argumenta que una empresa certificada se hace visible ante el mundo. Dessoff (2001) explica que la implementacion de normas de seguridad industrial disminuyen los riesgos de problemas ergonómicos en los trabajadores. Morris (2003) explica que en estos programas es conveniente la intervención de profesionales de la salud como terapeutas y enfermeras. Según Madsen (2000) la seguridad debe ir vinculada al producto como la calidad, es intrínseca a éste y no una característica aparte. Milliman, et al. (2005) presentan un estudio de caso sobre un proyecto piloto de implementación de la seguridad de una empresa en Estados Unidos, concluyendo sobre la importancia del impacto. Este trabajo muestra como se puede realizar masivamente la implementación en empresas micro, pequeñas y medianas siguiendo la metodología aquí desarrollada. Este estudio se podrá replicar en otras empresas brindando seguridad en el trabajo a las personas.

#### METODOLOGÍA

La muestra de empresas en las cuales se desarrolló este proyecto para el componente Salud Ocupacional y Seguridad Industrial corresponde a 125 empresas. Estos negocios se encuentran ubicados en Colombia en ocho ciudades del país (Ver Tabla 1). Las zonas del proyecto corresponden a aquellas en las que Ecopetrol S.A. tiene operaciones de extracción, transporte o refinamiento de petróleo, pues este fue el criterio empleado para seleccionarlas. El 25,6% de las empresas del proyecto se retiraron del mismo durante los primeros 4 meses de ejecución principalmente porque no tenían la capacidad organizacional o un negocio sobre el cual implementar el sistema de gestión de seguridad industrial y salud ocupacional (14 empresas correspondientes al 14,4% del total de empresas). Otro grupo importante de empresas fue retirado del proyecto por el equipo ejecutor pues no pagaron el valor de su inscripción en el mismo (14 empresas correspondientes al 11,2% del total de empresas).

Tabla 1: Distribución de la muestra por ciudades inicio-fin del proyecto. Elaboración propia.

CIUDAD	Yopal	Magdalena Medio*	Orito	Cúcuta	Tibú	Barrancabermeja	Cartagena	Villavicencio	Neiva	Total
EMPRESAS INICIARON	15	16	13	16	13	13	12	12	15	125
EMPRESAS FINALIZARON	14	11	6	12	9	9	8	9	15	93

\* Corresponde a poblaciones ubicadas en la rivera del Río Magdalena en los estados de Santander, Bolívar y Antioquia. (Yondó, Cantagallo, Vereda El Centro – Barrancabermeja, Puerto Berrio, Sabana de Torres, Puerto Nare)

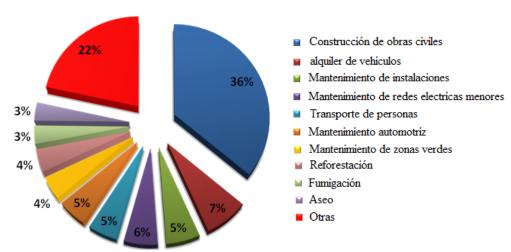
La muestra de empresas del proyecto estuvo conformada por 42,55% microempresas, 44,68 pequeñas empresas y 12,77% medianas empresas, de acuerdo con la clasificación legal que utiliza Colombia para determinar el tamaño de la empresa. En la tabla 2 se observan los promedios de empleados y activos de las empresas por cada zona. Al calcular la relación entre el número de trabajadores totales de las empresas que hicieron parte del proyecto, 2.077 empleados en total, con el número de habitantes del municipio, se observa que el proyecto tiene mayor relevancia para las zonas de Yopal y Magdalena Medio.

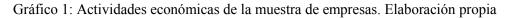
Tabla 2: Información de las empresas de la muestra. Elaboración propia

Zona Proyecto	Número de habitantes	Número de empresas proyecto	Número Promedio de Empleados	Activos promedio en dólares	% de empleados de las empresas con relación al número de habitantes
YOPAL	114.043	14	34,00	845.372	0,4174%
MAGDALENA MEDIO	67.798	11	10,50	170.084	0,1704%
TIBÚ	34.733	9	5,46	83.176	0,1415%
BARRANCABERMEJA	190.058	9	15,46	841.134	0,0732%
ORITO	40.558	6	4,38	90.796	0,0649%
NEIVA	335.578	15	11,88	735.706	0,0531%
VILLAVICENCIO	367.445	9	19,92	231.022	0,0488%
CARTAGENA	828.226	8	31,69	925.920	0,0306%
CÚCUTA	482,490	12	11,00	317.797	0.0274%
PROMEDIOS TOTAL	273.437	10,33	16,03	471.223	0,1141%

Esta tabla muestra el número de habitantes en la ciudad, el número de empresas vinculadas en el proyecto, el número de empleados en las empresas de la muestra y el porcentaje de empleados de las empresas con relación al número de habitantes.

En la gráfica 1 se observa la distribución de las empresas por su actividad económica, destacando que la organización de las actividades económicas del proyecto corresponde a la utilizada por Ecopetrol S.A. para clasificar a sus proveedores locales. Todas las empresas de la muestra son prestadoras de servicios y la actividad con mayor relevancia es la construcción de obras civiles. Teniendo en cuenta que las empresas de la muestra emplean una gran cantidad de mano de obra no calificada y que los niveles de riesgo industrial de estas actividades son elevados, la ejecución de este proyecto resulta muy relevante para garantizar la salud ocupacional de los trabajadores.

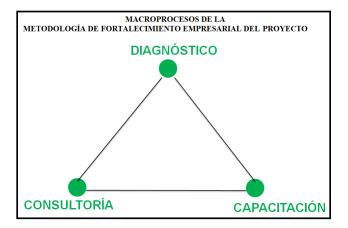


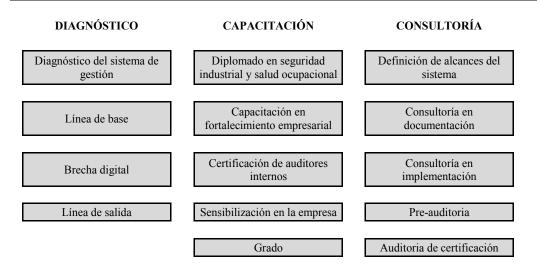


Este gráfico muestra la distribución de las empresas de la muestra según la actividad económica.

El proceso metodológico de intervención y trabajo con las empresas fue ejecutado en cada zona por un equipo de dos profesionales. El líder del equipo fue un experto con más de cinco años en implementación de sistemas de gestión de salud ocupacional y seguridad industrial. El profesional de campo, radicado en la zona, fue un especialista con por lo menos un año de experiencia en procesos de certificación de empresas en calidad. Este equipo contaba con el soporte y liderazgo del equipo directivo del proyecto, conformado por el gerente del componente, el coordinador académico del proyecto y el director del proyecto.

Diagrama 1: Organización de actividades del proyecto por macroprocesos. Creación Propia





Este diagrama muestra la organización de las actividades ejecutadas durante el proyecto.

En el proyecto las actividades se organizaron en tres grandes procesos:

1. Diagnóstico para determinar cuál es el estado del sistema de gestión de la empresa, sus recursos y su punto de partida en seguridad industrial y salud ocupacional.

2. Capacitación para llevar conocimiento técnico a la empresa y desarrollar competencias especificas en salud ocupacional y seguridad industrial en sus trabajadores

3.Consultoría para asegurar que el sistema de gestión en seguridad industrial y salud ocupacional es implementado en la empresa de acuerdo a los estándares que exige la norma OHSAS 18001.

El diagnóstico del sistema de gestión fue realizado por el equipo consultor de la Corporación Calidad con metodología propia de esta organización bajo el modelo de excelencia en la gestión que ha venido desarrollando durante 20 años de administración del premio nacional de la Excelencia en la Gestión Empresarial en Colombia.

Tabla 3: Dimensiones del diagnóstico del sistema de gestión. Tomado de Estudio del Nivel de Gestión de Mipymes en la Cadena de Abastecimiento de Bienes y Servicios de Ecopetrol, Enero 2012.

DIMENSIÓN	BREVE EXPLICACIÓN
Estrategia	Pensamiento organizacional, formulación estratégica, despliegue, alineamiento estrategia-estructura-cultura, entre otros.
Liderazgo	Estilo de liderazgo, cultura organizacional, ética y gobierno corporativo.
Personas	Desarrollo Integral de las personas, calidad de vida en el trabajo, entre otros.
Procesos	Gestión de la rutina, Relaciones con proveedores, entre otros.
Conocimiento e Información	Gestión de información, gestión del conocimiento.
Capacidad de Innovación	Estrategia de Innovación, Cultura de Innovación resultados de la innovación, entre otros.
Clientes y Mercados	Conocimiento de clientes y mercados, relaciones con los clientes, entre otros.
Resultados	Creación de valor para grupos sociales objetivo, competitividad, sostenibilidad.
Seguridad Industrial y salud	Evalua la estrategia manejo de la organización en seguridad para los trabajadores y condiciones laborales
ocupacional	

Esta tabla muestra las ocho dimensiones que contempla el modelo más la dimensión de Seguridad Industrial y Salud Ocupacional desarrollada especialmente para este proyecto.

La metodología para medir la brecha digital es un desarrollo específico producto de la alianza Ecopetrol y Unión Temporal Corporación Calidad – Universidad Jorge Tadeo Lozano para realizar el diagnóstico correspondiente a las empresas participantes en los proyectos tanto del año 2010 como del 2011. La encuesta incluyó cinco aspectos o dimensiones: a)Hardware en uso, b)Software, c)Conectividad para la operación de la empresa, d)Presencia y uso de internet, e)Procedimientos y personas para la gestión de TICs. Las preguntas acerca de hardware incluyeron desde el tipo de procesadores, capacidad de almacenamiento de información y la instalación de red interna hasta el uso de dispositivos como fotocopiadora o scanner. En cuanto al software, el sondeo buscó determinar sistemas operativos, uso de antivirus, desarrollo de programas propios y uso de plataformas de trabajo. En cuanto a conectividad, se indagó tanto por la conexión mediante internet como por tecnologías de recolección de información en campo. Las cuestiones sobre el uso de internet y la presencia de la empresa en el mismo se orientaron a determinar si las empresas tenían páginas web, si se tenían plataformas de comercio electrónico, si utilizaban plataformas e-learning, entre otras prácticas. Finalmente, respecto a procedimientos y personas para el manejo de tecnología se indagó por la existencia de planes estratégicos de tecnología, responsables de este aspecto y relevancia del manejo de tecnología por parte de los trabajadores.

Para cada uno de los cinco aspectos o dimensiones establecidos, se determinó una escala de valoración (0-100%) que pretende medir el nivel que maneja cada empresa al momento de realizar la encuesta. El valor o calificación se establece siguiendo, para cada aspecto, o bien una tabla descriptiva o un cálculo relativo a lo disponible actualmente en el mercado. Se determinó como Nivel Digital al promedio de estas cinco mediciones particulares. A partir de la información recolectada en las empresas, para comparar contra los niveles de gestión observados, estadísticamente se establecieron seis rangos cualitativos para los niveles de manejo digital: Muy bajo (hasta 37,5%), Bajo (hasta 47,5%), Intermedio bajo (hasta 57,5%), Intermedio alto (hasta 67,5%), Alto (hasta 77,5%) y Muy alto (hasta 100%). Se establece como Brecha Digital la distancia que una empresa tiene para alcanzar el nivel Alto de manejo digital.El diplomado en seguridad industrial y salud ocupacional fue tomado por dos personas en promedio por cada una de las empresas participantes del proyecto y tuvo la estructura académica que la tabla 5.Una vez culminado el diplomado, se desarrolló una formación de 16 horas con los gerentes de las empresas en estrategia organizacional y creación de valor, pues se identificó dentro del diagnóstico de gestión que esta área requería refuerzo en las organizaciones. Igualmente al terminar el diagnóstico los estudiantes presentaron una evaluación para certificar sus conocimientos y habilidades como auditores internos este proceso tuvo una evaluación de conocimientos y el desarrollo de un caso.

Como primer paso de la consultoría cada empresa definió el alcance del sistema SISO<sup>1</sup> especificando los procesos organizacionales en que se centraría el sistema y por ende la certificación, teniendo en cuenta que el sistema debe operar sobre un negocio o actividad que esté desarrollando la empresa. Cada empresa definió cual sería dicha actividad o negocio. Igualmente definieron la organización certificadora que se encargaría de realizar la auditoría final.

Aquellas personas que en el macroproceso de capacitación se desempeñaron como estudiantes, en el macroproceso de consultoría toman el rol de trabajadores líderes y los profesores el rol de consultores. Los primeros esfuerzos de la consultoría se realizaron documentando los procesos relacionados con el alcance definido y la directriz de la alta dirección de la empresa respecto al sistema SISO. Cuando el grado de avance en el proceso de documentación fue mayor al 50% los consultores y trabajadores líderes procedieron a iniciar la implementación del sistema en las actividades generales de la empresa y específicamente en los negocios y actividades específicamente seleccionados. En este último proceso las empresas invirtieron importantes recursos económicos en mejorar su mobiliario de oficina, la señalización de sus instalaciones, el orden en sus bodegas y puntos de venta, los uniformes de sus trabajadores, la afiliación al sistema de riesgos profesionales y seguridad social del país y en realizar exámenes médicos a sus trabajadores, entre otros. Una vez culminada la consultoría de implementación un experto del equipo de trabajo del proyecto diferente al que había trabajado como consultor visitó la empresa para realizar una pre-auditoría que identifique las deficiencias menores y mayores del sistema, conocidas como *no* 

<sup>&</sup>lt;sup>1</sup> SISO, abreviatura de Salud Industrial y Salud Ocupacional

*conformidades*, y diera a la empresa recomendaciones para subsanarlas. Este proceso se efectuó en todas las empresas de la muestra.

#### **RESULTADOS ALCANZADOS POR EL PROYECTO**

- 64,8% de las empresas que iniciaron el proyecto (81 empresas) fueron certificadas bajo la norma OHSAS 18001.
- La eficiencia de la metodología es del 87%, ya que de las empresas que siguieron todo el proceso que son 93 se certificaron 81.
- 82 estudiantes del diplomado se certificaron como autores internos.
- 171 estudiantes graduados del diplomado en SISO.
- 1.640 trabajadores cubiertos en empresa con sistemas SISO.

#### CONCLUSIONES

Para que el sistema de gestión sea sostenible en las empresas, es indispensable que se convierta en parte de la cultura de la empresa, lo que significa que debe tener un decidido apoyo de la alta dirección y un grado de sensibilización fuerte por los trabajadores.

Para que una empresa logre con éxito la implementación del sistema de gestión en salud ocupacional y seguridad industrial requiere un grado mínimo de desarrollo organizacional que le permita contar con los recursos financieros necesarios para costear los gastos de implementación y capacitar al personal necesario. El costo promedio que tuvo cada una de las empresa para el proyecto fue de 11.305 dólares, para encontrar el valor que debería pagar una empresa para implementar el sistema a este valor es necesario sumarle los gastos de implementación que dependen del estado inicial de cada empresa. El mayor factor de éxito del proyecto estuvo en la adecuada combinación de los macroprocesos de

capacitación, consultoría y diagnóstico, pues de esta forma los empresarios lograron detectar sus brechas de gestión, entregaron el conocimiento a sus trabajadores para que disminuyeran las no conformidades y en equipo con los consultores implementaron adecuadamente el sistema.

El proceso de pre-auditoría desarrollado fue pieza esencial para la certificación del sistema, pues permitió a los empresarios tener una evaluación independiente previa a la certificación, que orientó los últimos esfuerzos de recursos para la implementación del sistema, asegurando un elevadísimo porcentaje de éxito en las auditorías de certificación.En el proceso de consultoría administrar la organización documental y la de implementación, favoreció la implementación del sistema de manera ostensible, pues la documentación de los procesos jugo el rol de proceso de planeación anterior a la implementación.

En las zonas donde el proyecto se desarrolló cuentan con pocos profesionales idóneos para administrar los sistemas de gestión de SISO de la las organizaciones, de lo anterior se deduce que el esfuerzo que hicieron Ecopetrol S.A., La Corporación Calidad y la Universidad Jorge Tadeo Lozano por desarrollar los recursos humanos de estas importantes regiones de Colombia, contribuye notablemente a mejorar las condiciones de seguridad industrial de las empresas aumentando la productividad de las regiones.

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# LA CALIDAD DEL SERVICIO EN CAFETERIA, SEGÚN PERCEPCION DE USUARIOS

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#### RESUMEN

La presente ponencia muestra los resultados de estudiar la percepción de los usuarios sobre la calidad de servicio de la cafetería de una universidad, a partir de la aplicación de un cuestionario diseñado con base a la escala SERVQUAL. Para lo cual se diseñó una investigación exploratoria considerando la población potencial de los distintos usuarios, definiendo estratos para garantizar la participación de todos en la muestra proporcionalmente a su tamaño. Los resultados por variables independientes y respecto a la calidad de servicio indican que para el 70% esta se define como excelente y buena, mientras para el 30% restante su percepción se divide entre mala y pésima.

PALABRAS CLAVE: Calidad del servicio, Cafetería, percepción, usuarios

### SERVICE QUALITY IN CAFETERIA BY USER PERCEPTION

#### ABSTRACT

This paper shows the results of studying the perception of users on the service quality of a university cafeteria, from the application of a questionnaire designed based on the SERVQUAL scale. To which exploratory research was designed considering the potential population of different users, defining strata to ensure the participation of all in the sample in proportion to its size. The results for independent variables regarding the quality of service indicate that 70% is defined as excellent and good, while for the remaining 30% is divided between perception and awful bad.

#### **JEL:** M10

**KEYWORDS:** Quality of service, coffee shop, perception, users

#### INTRODUCCION

La calidad en el servicio es de gran importancia en todos los negocios, debido a que los clientes son más exigentes, están más informados, experimentan y disfrutan más de la variedad de productos y servicios que ofrecen el mercado de alimentos y bebidas (López, 2011). El sector servicios atraviesa por un periodo de cambio casi revolucionario en el que las formas establecidas de hacer negocios siguen cambiando de dirección. Continuamente se observa que los avances en el sector trasforman la manera de vivir y de trabajar. Los innovadores lanzan con frecuencia nuevas formas de satisfacer las necesidades actuales (Lovelock, et al., 2011). En la actualidad, la calidad en el servicio al cliente es un indicador del buen desempeño de cualquier empresa, siendo un valor agregado necesario que se ofrece para poder destacar en el mercado actual. Cuando se brinda calidad en el servicio al cliente se puede obtener la lealtad al producto o servicio y posicionar a la empresa respecto a la competencia (Vera y Trujillo, 2009).

El sector restaurantero de México se ha convertido en el motor de la economía y en uno de los principales generadores de empleo, cuenta con más de 428 establecimientos, de los cuales el 96% son micro, pequeños y medianos negocios, además representa una vía para que muchos mexicanos desarrollen su espíritu empresarial e inicien un negocio (Secretaría de Economía, 2011).

Sin embargo, en algunos casos los establecimientos de venta de alimentos y bebidas preparadas suelen emerger en tiempo de crisis como negocios informales. De acuerdo con el Instituto Nacional de Estadística y Geográfica (INEGI, 2000) el sector informal, está integrado por todas aquellas empresas no constituidas en sociedad que forman parte del sector de los hogares, dedicadas a la producción de bienes o servicios, con la finalidad primordial de generar empleo e ingreso para las personas involucradas.

Esto ha dado como resultado que en los últimos años se hayan inaugurado una cantidad importante de restaurantes en la ciudad de Ensenada. La mayoría sin un plan de negocio, sin un previo conocimiento de la industria restaurantera y sin contar con asesoría profesional que guíe a los propietarios a desarrollarse dentro del sector. Como consecuencia la falta de calidad en el servicio al cliente es una característica común. La Cámara Nacional de la Industria de Restaurantes y Alimentos Condimentados (CANIRAC, 2011) ha iniciado un programa de capacitación en Ensenada para mejorar la atención al cliente, porque considera que el objetivo general de todo negocio es lograr la satisfacción de los clientes.

La calidad en el servicio que ofrece la cafetería de la Universidad Autónoma de Baja California (UABC) Unidad Ensenada (UE), se desconoce, ya que no se ha realizado un estudio para valorarla. La cafetería ha pasado por varias fases desde su inicio. Con el crecimiento de la UABC-UE, tanto en alumnos, profesores, docentes y personal administrativo, la demanda del producto fue mayor. Es así como surge la necesidad de que se existiera una cafetería que diera abasto a la demanda solicitada. Entonces las autoridades de la universidad concesionaron el manejo de la cafetería por medio de licitaciones.

Actualmente el concesionario que opera la cafetería lo hace desde 2004. Sin embargo desde hace más de más de cuatro años, se escuchan comentarios del personal y alumnado sobre el servicio que presta la cafetería, señalando que no es bueno, que carece de calidad en cuanto a la imagen (instalaciones, mobiliario y ambiente), servicio al cliente (rapidez, amabilidad, cortesía y comunicación) y presentación en su menú (menú monótono, los platos a temperatura inadecuadas, texturas del producto, sabor y poca variedad-escasa). El espacio disponible para la cafetería es absorbido por el concesionario desde su construcción hasta el mobiliario y pagan una renta mensual de aproximadamente 18,000.00 (dieciocho mil pesos moneda nacional) por el uso de suelo, ya que la luz y el agua va incluido en su renta. Un porcentaje de la ventas de la cafetería es para el Sindicato Estatal de Trabajadores Universitario (en adelante SETU) (J. Serrano T., comunicación personal, 10 de septiembre, 2011).

La UABC-UE, cuenta con una población de 4,281, la cual está dividida entre estudiantes de licenciatura, estudiantes de posgrado, académicos (profesores e investigadores) y administrativos, todos ellos conforman la comunidad universitaria. En general se puede decir que la población universitaria se encuentra dividida en varios segmentos de mercado ya que varía tanto en los gustos como en las preferencias. La cafetería de la UABC-UE esta concesionada y funciona como una empresa prestadora de servicios de alimentos y bebidas, cómo tal depende de sus clientes para sobrevivir. El objetivo del presente trabajo consiste en analizar la calidad de servicio de la cafetería UABC-UE, desde la óptica cliente-proveedor. Es importante que la cafetería del la UABC-UE tenga conocimiento de la percepción, que tienen los consumidores universitarios acerca de la calidad en el servicio que ofrecen, con el fin de poder desarrollar e implementar nuevas ideas, estrategias e innovaciones en cuanto al servicio que prestan. El alcance de este proyecto consiste en conocer la percepción que tiene la comunidad universitaria en relación con la calidad en el servicio que ofrece la cafetería de la UABC-UE, por ello la investigación se define como exploratoria-descriptiva. Se utiliza la herramienta SERVQUAL para evaluar la percepción del consumidor con respecto a la calidad en el servicio.

#### **REVISION LITERARIA**

Duque (2005) comenta que La Real Academia Española define calidad como la propiedad o conjunto de propiedades inherentes a algo que permiten juzgar su valor. También cita a Juran (1990) para señalar que la calidad consiste en aquellas características de producto que se basan en las necesidades del cliente y que brindan satisfacción. El concepto de calidad puede ser tan confuso, debido en parte a que las personas consideran la calidad de acuerdo con diversos criterios basados en sus funciones dentro de la cadena de valor de producción comercialización. Los bienes y servicios producidos deben satisfacer las necesidades del cliente, de hecho, la existencia de las empresas depende de la satisfacción de las necesidades de sus clientes (Evans y Lindsay, 2008).

Camisón et. al., (2007) comentan que la calidad pueden organizarse en dos categorías: en calidad objetiva y calidad subjetiva. La primera se deriva de la comparación entre un estándar y un desempeño, referidos a características de calidad medibles cuantitativamente con métodos tecnológicos, describiendo los atributos del producto o de un proceso, independientemente de la persona que realiza la medición o adquiere el producto. Y la segunda se basa en la percepción y en los juicios de valor de las personas, y es medible cualitativamente estudiando la satisfacción del cliente y por lo mismo se dice que:

La calidad objetiva está implícita en los conceptos de calidad como excelencia, la calidad como conformidad con las especificaciones o basada en el producto, y la calidad como aptitud para el uso. La calidad subjetiva se desprende de la definición de calidad como satisfacción de las expectativas del cliente (Camisón et al., 2007:149).

La calidad del servicio es la base de la supervivencia de una empresa: la competencia y la existencia de clientes cada vez mejor informados son dos factores que contribuyen a esta concienciación. Estas observaciones, deben hacer comprender a las empresas lo interesante que resulta perseguir un servicio de calidad para diferenciarse de la competencia, obtener la fidelidad de los clientes para mantener y aumentar sus beneficios, pues los clientes satisfechos de hoy son los beneficios del mañana (Cerezo, 1997).Una empresa de servicio se puede diferenciar proporcionando una calidad consistente y superior a la de los competidores. Al igual que los fabricantes de productos, la mayoría de las industrias de servicios se han incorporado a la tendencia de la calidad orientada hacia el cliente. Por otro lado resulta más difícil de definir y valorar la calidad del servicio que la calidad de un producto. Un ejemplo claro que resulta difícil ponerse de acuerdo sobre la calidad de un corte de cabello que sobre la calidad de un secador de cabello (Kotler y Armstrong, 2008).

Kotler (2001), define el servicio como cualquier acto o desempeño que una parte puede ofrecer a otra y que es en esencia intangible, no dando origen a propiedad de algo. Con frecuencia los servicios desempeñan un papel importante en la economía global y bienestar de la comunidad. La calidad del servicio constituye para muchas organizaciones una cualidad que les permite diferenciarse y cautivar a sus clientes, adquiriendo relevancia como variable diferenciadora que incide sobre las decisiones de los consumidores y sobre los resultados de un negocio.Definido el concepto de calidad en el servicio, es necesario determinar de qué manera habrá de medirse en forma válida y fiable: medirlo, es un gran reto debido a la naturaleza e intangibilidad. Existen dos escalas que pueden ser utilizadas, estas son conocidas como SERVQUAL y SERVPERF.

Parasuraman, et al, (1985, 1988) en una investigación que llevaron a cabo, formulan un modelo conceptual de la calidad de servicio donde realizaron un primer estudio exploratorio aplicando a cuatro tipos de servicios como: banca, tarjetas de crédito, agente de seguros y servicios técnicos. Les permitió identificar diez elementos que determinara la calidad de servicio independientemente del tipo de servicio considerado. Estos elementos fueron los siguientes: Elementos tangibles, Fiabilidad, Capacidad de respuesta, Profesionalidad, Cortesía, Credibilidad, Seguridad, Accesibilidad, Comunicaciones,

Compresión del cliente. En la conceptualización de la calidad planteada por Parasuraman, Zeithaml y Bery (1988) se supone que los clientes comparan sus expectativas con sus percepciones para cada una de las dimensiones o criterios considerados clave en la experiencia de servicio: la tangibilidad, la fiabilidad, la capacidad de respuesta, la seguridad y la empatía. Este es un modelo incluye como herramienta de medición la escala SERVQUAL, el cual se elegirá este instrumento para llevar a cabo la medición de la cafetería UABC-UE.Como el estudio se enfoca a un establecimiento del tipo cafetería se considera pertinente definir restaurante, según Fernández (1997) es un establecimiento donde se ofrece un menú, se presta un servicio y atención de calidad dentro de una atmósfera agradable. El término se deriva de latín restaurare, que quiere decir recuperar o restaurar.

#### METODOLOGIA

Se diseño una investigación con enfoque cuantitativo de tipo descriptivo, ya que se miden, evalúan o recolectan datos sobre diversos conceptos según lo mencionan Hernández, Fernández y Baptista (2006:102) "los estudios descriptivos únicamente pretenden medir o recoger información de manera independiente con base a los concepto o la variables y no es el indicar cómo se relacionan dichas variables". El diseño de la investigación es no experimental transeccional descriptivo ya que según Hernández Fernández y Basptista (2006:208) "es puramente descriptivo, sin manipular las variables y recolectar los datos en una solo exhibición, en un tiempo único, tomando una muestra representativa de la población y seleccionarla en forma aleatoria", con el fin de evaluar la calidad en el servicio que percibe la comunidad universitaria con respecto a la cafetería UE.

En la página electrónica de la UABC, en la sección de la Coordinación de Servicios Estudiantiles y Gestión Escolar (CSEGE, 2012), se recabo información sobre la población estudiantil de la UE. Mientras al Departamento de Recursos Humanos UE, se le solicito el número de personal tanto administrativo como académico, con ello se obtuvo la población objeto de estudio: población estudiantil: 3,425; personal administrativo y académico 856 (Departamento de Recursos Humanos, comunicación personal, febrero, 2012), ello totaliza una población total de N= 4281 sujetos de estudio, con ello como punto de partida se determinó el tamaño de la muestra, con base a un intervalo de confianza del 95%, un error del 8%, usando la fórmula de cálculo con base a proporciones, resultando n=438, la cual se divide por estratos, cuyo desglose se ilustra en la tabla 1.

Tabla 1: Desglose de la muestra por esta	atos
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Descripción	Población	Muestra
Alumnos de licenciatura	3148	143
Alumnos de posgrado	277	97
Académicos	710	124
Administrativos	146	74
Total	4281	438

La tabla muestra los datos poblacionales de los distintos estratos que conforman los sujetos de estudio, el cual fue la base para calcular la muestra a fin de tener representatividad. Se ilustra el tamaño de muestra calculado considerando 95% de intervalo de confianza y 8% de error. Fuente: Elaboración propia con base al muestreo por estratos.

La aplicación de la encuesta se realizó en forma aleatoria en forma personal para garantizar la información. El total de cuestionarios a aplicar no se cubrió debido a que los usuarios no accedieron, obteniendo una tasa de respuesta de 380 sujetos de estudio, que representa el 86.75% de la meta proyectada.El instrumento de medición está integrado en dos partes; la primera etapa incluye nueve preguntas demográficas con la intención de caracterizar a los sujetos de estudio; la segunda etapa presenta las preguntas del modelo SERVQUAL, está compuesta por de 25 ítems a partir de las dimensiones: confiabilidad, amabilidad, servicio, instalaciones, y producto. Las primeras tres dimensiones se manejaron como los aspectos tangibles mientras que las últimas dos se manejaron como intangibles.

Antes de iniciar el trabajo de campo, se probó el cuestionario (piloto) con un pequeño grupo de la población, 30 personas. El resultado de alfa de Cronbach es de 0.963, que indica que el cuestionario es confiable. Por lo que se procedió a la aplicación del el instrumento. Se ejecutó la información recabada de los encuestados en el programa Statistical Packege for the Social Sciencies (en adelante SPSS), en la versión 17.0 para Windows, el cual arrojó un alfa de Cronbach general de 0.985, lo que representa un grado de confiabilidad alto (Hernández, et. al, 2006).

#### RESULTADOS

En relación a los encuestados el 52.1% son de género masculino y el 47.9% femenino. La mayoría (62.37%) está en el rango de edad entre los 17 a 25 años; el 27.37% se ubica entre los años de 26 a 35 y los mayores de 36 representan el 10.25%. El principal mercado son los estudiantes que en conjunto alcanzan el 80.53%. Respecto al objetivo planteado de analizar la calidad de servicio de la cafetería UABC-UE, este se realizó desde las variables confiabilidad, amabilidad, producto, instalaciones y servicio. En relación a la variable confiabilidad el 39% de los sujetos de estudio la considera excelente y 42% buena. Pero el 19% tiene una opinión repartida que va desde regular a pésima. Es importante destacar que lo que se midió fue percepción, la cual está influenciada por la cultura del sujeto de estudio en cuanto al gusto por el tipo de comida, es decir perciben muy distinto alumnos de licenciatura y académicos, ello puede explicar los resultados.

La amabilidad al recibir atención en la cafetería en un factor relevante, de acuerdo con los resultados el 41% opina que es excelente y un 35% que es buena. Pero un 18% señala que es pésima, lo cual representa un área de oportunidad para los concesionarios a fin de poder mejorar la relación con sus clientes que redunde en mayores ventas. La variable amabilidad está muy ligada con la variable servicio, al menos los resultados parecieran estar alineados, el 34% opina que es excelente y para el 39% es bueno. Resalta un 9% que lo considera pésimo. Conocer la percepción a cerca de los productos que se expenden también es importante, al respecto se infiere que la población opina en un 37 % que son buenos, para el 36% son excelentes, pero un 10% los califica de malos a pésimos. Nuevamente esta percepción puede estar influenciada por los hábitos de consumo en relación al tipo de alimentos que gustan los clientes consumir. Al ser la mayoría de ellos estudiantes de licenciatura, cuyos gustos son más por los denominados alimentos chatarra que son mayoría en el menú puede explicar estos resultados.

La última variable estudiada son las instalaciones, el 37% las define como buenas y un 31% como excelentes, pero el 32% restante opina que son malas y pésimas. Considerando que el mobiliario es viejo e incomodo se entienden las diferencias de opinión.Con base en los resultados de cada variable independiente se determinó la calificación de la percepción respecto a la calidad del servicio de la cafetería UABC-UE, la cual es considerada como buena por el 30% y excelente por un 29%.

#### CONCLUSIONES

El estudio permitió identificar que la percepción que tienen los usuarios sobre la calidad del servicio que presta la cafetería UABC-UE es calificada de buena a excelente por el 60%, mientras el 40% restante la califica de pobre a pésima, situación que se debe al tipo de usuario o consumidor, dado que el establecimiento no tiene identificados nichos de mercado y ofrece en el menú una lista de opciones de platillos y productos reducida mayormente orientada al cliente joven (estudiante) y no al adulto (trabajador). Por lo que sería recomendable identificar los nichos de mercado, sus preferencias y atenderlas a fin de que el 100% de los comensales estén satisfechos.

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# EL CAMINO HACIA LA CERTIFICACIÓN DE LA CALIDAD DE LOS PROGRAMAS EDUCATIVOS EN LA EDUCACIÓN SUPERIOR EN MÉXICO: UNA EXPERIENCIA DEL POSGRADO EN DERECHO EN LA UNIVERSIDAD AUTÓNOMA DEL ESTADO DE MORELOS

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#### RESUMEN

En la presente investigación, empleando el método de caso, se hace la revisión de las acciones y estrategias adoptadas por la División de Estudios Superiores de Posgrado de la Facultad de Derecho y Ciencias Sociales de la Universidad Autónoma del Estado de Morelos (México) para lograr acreditar ante el Consejo Nacional de la Ciencia y la Tecnología a los programas educativos de maestría en derecho y de doctorado en derecho y globalización que se ofertan en dicha institución, como programas educativos de calidad y, con ello, ser inscritos en el padrón nacional de posgrados de calidad (PNPC) del CONACYT. La investigación tiene como objetivo el constatar si dichas acciones y estrategias empleadas para lograr la acreditación como programas educativos de calidad en México, pueden también ser considerados programas educativos de calidad a nivel internacional por ajustarse a las recomendaciones establecidas por la UNESCO en la Declaración Mundial sobre la Educación Superior en el Siglo XXI: Visión y Acción, la cual fue celebrada en París del 5 al 9 de octubre de 1998. El determinar si estos programas educativos cumplen con dichas recomendaciones, constituye un elemento fundamental para establecer el nivel de calidad que actualmente presentan los referidos programas en beneficio del conocimiento de la ciencia jurídica, y con ello, poder establecer la calidad y pertinencia del servicio educativo que desarrolla dicha institución en favor de la innovación, generación y difusión del conocimiento jurídico.

PALABRAS CLAVE: Educación superior, calidad, programas educativos.

### THE ROAD TOQUALITY CERTIFICATIONOFEDUCATIONAL PROGRAMSIN HIGHER EDUCATIONINMEXICO: AN EXPERIENCEOFGRADUATEINLAWAT THE UNIVERSITYMORELOSSTATE AUTONOMOUS.

#### ABSTRACT

In this investigation, making use of case method, actions and strategies adopted by the College Graduate belonging to UAEM's Law and Social Science faculty, to endorse before the National Science and Technology Council the Master in Law and PHD in Law and Globalization educational programs, which are offered in these institution as quality educational programs, an with this, being enrolled in the National Register of Quality Graduate belonging to CONACYT, are being reviewed. The objective of this investigation, is to confirm if the actions and strategies employed to endorse as quality educational programs in Mexico, could be considered as international quality educational programs too, for having responded to the recommendations established by UNESCO in the World Declaration on Higher Education for the XXI century: Vision and Action, which was celebrated in Paris from October 5th to 9th in 1998. Determining if these educational programs meet this recommendations is an essential element to establish the quality level which is currently presented by such programs, in the benefit of legal science

knowledge, and with this, being able to establish quality and pertinence of the educational service which is being developed by this institution, in pro of innovation, generation, and diffusion of legal knowledge.

#### **JEL:** I000, I200, I230, I280, K100

**KEYWORDS:** Higher Education, quality, educational programs.

#### INTRODUCCIÓN

A partir de los últimos años de la década del siglo pasado, y desde luego en los que han transcurrido en este siglo, en la educación superior en México, así como en general la que se imparte en muchos otros países integrantes de la comunidad mundial, los programas educativos han sido motivo de estudio, análisis, revisión y evaluación, todo ello con el afán de determinar y certificar su calidad educativa.

La acción de establecer la calidad de un programa educativo y como consecuencia certificarlo como tal resulta interesante, compleja e incluso polémica puesto que todo programa educativo que se oferta en una institución educativa, presupone contar con amplia solvencia y por tanto gozar de calidad, no obstante esta presunción, es necesario reflexionar si en la realidad, los programas educativos que se imparten en México que corresponden al nivel de educación superior, son de calidad y con una adecuada eficiencia terminal.Hoy en día, la tendencia de la acreditación de calidad, es una de las evidentes manifestaciones del fenómeno de la globalización, el cual es claro no sólo forma parte de los procesos económicos, sino que también extiende su influencia a todos los ámbitos del desarrollo y conocimiento humano, como son el político, el social, el jurídico y, desde luego, el educativo.

Es del conocimiento de la sociedad en general, que en los diversos foros regionales y mundiales en materia educativa, se ha planteado la primordial necesidad que todo Estado debe enfrentar en el sentido de ampliar la cobertura educativa a todos los integrantes de su sociedad, el problema que se ha detectado y discutido es el cuantitativo, esto es, lograr hacer llegar la educación a todo el pueblo, sin discriminación alguna como requisito básico para sustentar una vida con democracia, en tal sentido los Estados se plantean metas, trabajos y estrategias para promover la "educación para todos." En México, esta regla no ha sido la excepción, el Estado ha realizado trabajos de gran impacto a fin de lograr superar el problema cuantitativo, esto es, el problema de ofertar una educación de calidad, una educación que busque en la formación de los estudiantes y, por tanto, de la sociedad en general, el nivel más óptimo posible de calidad.

En el contexto que se ha señalado, el presente trabajo de investigación tiene como objetivo principal llevar a cabo, por una parte, el estudio y revisión de las estrategias que en la educación superior en México y en específico en el caso objeto de estudio, se han implementado y se están llevando a cabo, a efecto de lograr que sus programas educativos de posgrado, logren alcanzar el nivel de calidad y, por otra parte, dicho estudio permitirá percatarse si las estrategias empleadas se ajustan a los elementos que en la UNESCO se han establecido de manera concreta para lograr el acceso a dicha calidad educativa.

#### **REVISION LITERARIA**

En la Conferencia Mundial sobre la Educación Superior celebrada por la UNESCO en París del 5 al 9 de octubre de 1998(Para mayor información véase http://www.unesco.org/education/educprog/wche/principal/system-s.html), se emitió la "Declaración Mundial sobre la Educación Superior en el Siglo XXI: Visión y Acción" en la que se proclamó en su artículo décimo primero los aspectos que de calidad deben atenderse en la educación superior, se precisa que la "calidad de la enseñanza superior es un concepto pluridimensional que debería comprender todas sus funciones y actividades: enseñanza y programas académicos, investigación y becas, personal, estudiantes, edificios, instalaciones, equipamiento y servicios a la comunidad y al mundo universitario" se hace también la mención especial de que "para lograr y mantener la calidad nacional,

regional o internacional, ciertos elementos son especialmente importantes, principalmente la selección esmerada del personal y su perfeccionamiento constante, en particular mediante la promoción de planes de estudios adecuados para el perfeccionamiento del personal universitario, incluida la metodología del proceso pedagógico, y mediante la movilidad entre los países y los establecimientos de enseñanza superior y entre los establecimientos de educación superior y el mundo del trabajo, así como la movilidad de los estudiantes en cada país y entre los distintos países. Las nuevas tecnologías de la información constituyen un instrumento importante en este proceso debido a su impacto en la adquisición de conocimientos teóricos y prácticos."Los propósitos de los estados participantes en la Conferencia Mundial sobre la Educación Superior en la que fue emitida en la "Declaración Mundial sobre la Educación superior en el Siglo XXI: Visión y Acción" ponen de manifiesto su primordial preocupación por trabajar y atender los aspectos de la calidad de la educación superior a nivel mundial, estableciendo no solamente la premisa de que debe cuidarse y elevarse el nivel de calidad educativa, sino que aún más, se disponen de manera concreta cuales son los elementos que deben desarrollarse en las políticas educativas de los estados para lograr la efectiva calidad de la educación superior.

Esta preocupación mundial planteada por la UNESCO no queda olvidada en la Declaración Mundial emitida en el año de 1998, la atención sobre la calidad educativa sigue formando parte de la agenda mundial, tal es el caso que precisamente en los trabajos realizados en la "Conferencia Mundial de Educación Superior 2009: Las Nuevas Dinámicas de la Educación Superior y de la Investigación para el Cambio Social y el Desarrollo"(Para mayor información véase http://www.unc.edu.ar/seccion/novedades/2009/julio/documento-de-la-conferencia-mundial-de-educacion), celebrada en París del 5 al 8 de julio de 2009, se pone de manifiesto en el preámbulo de dichos trabajos, la fundamental importancia que hoy en día debe darse a la calidad en la educación superior, estableciéndose que "al tiempo que se expande el acceso, la educación superior debe perseguir las metas de la equidad, la pertinencia y la calidad simultáneamente…"

#### Sobre La Educación En México Como Un Derecho Fundamental.

Al hablar sobre la educación en México, resulta necesario precisar que, por mandato constitucional, la Educación en México no sólo es considerada como un derecho constitucional, sino que inclusive es considerado como un Derecho Humano. (En México, la Constitución Política para los Estados Unidos Mexicanos en junio de 2011, ha sido motivo de una reforma sustancial mediante la cual en su artículo primero se establece entre otras cosas que "En los Estados Unidos Mexicanos todas las personas gozarán de los derechos humanos reconocidos en esta Constitución y en los tratados internacionales de los que el Estado Mexicano sea parte, así como de las garantías para su protección, cuvo ejercicio no podrá restringirse ni suspenderse, salvo en los casos y bajo las condiciones que esta Constitución establece..." La reforma permite destacar que si bien no se habla en lo particular y de forma expresamente literal de la educación, lo cierto es que se establece la prioridad que en el sistema jurídico mexicano tienen los derechos humanos, y siendo desde luego, la educación indiscutiblemente un derecho humano de tipo fundamental reconocido como tal en el ámbito internacional por la UNESCO y demás organismos internacionales, luego entonces queda inmerso dentro de la protección constitucional en los términos que se describe. Para mayor información. Para mayor información véase http://dof.gob.mx/index.php?year=2011&month=06&day=10).

La Constitución Política para los Estados Unidos Mexicanos vigente desde el año de 1917 ( Para mayor información *véase* http://www.diputados.gob.mx/LeyesBiblio/pdf/1.pdf), en su artículo tercero señala que: "todo individuo tiene derecho a recibir educación", se dispone además que la educación que imparta el Estado será gratuita y que la educación preescolar, primaria y secundaria conforman la educación básica y que ésta y la media superior serán obligatorias.(Para mayor información *véase* http://dof.gob.mx/nota detalle.php?codigo=5233070&fecha=09/02/2012).

En el mismo artículo, se establece que la educación que imparta el Estado tenderá a desarrollar armónicamente, todas las facultades del ser humano y fomentara en él, a la vez, el amor a la patria, el respeto a los derechos humanos y la conciencia de la solidaridad internacional, en la independencia y en la justicia, que además será laica; científica; además será democrática; nacional; y, contribuirá a la mejor convivencia humana. Sobre la educación superior se establece en el citado artículo tercero que " las universidades y las demás instituciones de educación superior a las que la ley otorgue autonomía, tendrán la facultad y la responsabilidad de gobernarse a sí mismas; realizarán sus fines de educar, investigar y difundir la cultura de acuerdo con los principios de este artículo, respetando la libertad de cátedra e investigación y de libre examen y discusión de las ideas; determinarán sus planes y programas; fijarán los términos de ingreso, promoción y permanencia de su personal académico; y administrarán su patrimonio. Las relaciones laborales, tanto del personal académico como del administrativo…"

#### El Camino Hacia La Calidad De La Educación Superior En México.

Ahora bien, sobre los procesos de calidad de la Educación Superior en México, que constituye precisamente el motivo central del presente trabajo, en el año de 1970 fue creado el Consejo Nacional de Ciencia y Tecnología(CONACYT),(Para mayor información

*véase*http://www.conacyt.gob.mx/Acerca/Paginas/default.aspx), por decreto del Congreso de la Unión, estableciendo que se trata de un organismo público de carácter descentralizado de la Administración Pública Federal, integrante del sector educativo, que goza de personalidad jurídica y patrimonio propio, y cuya responsabilidad primaria es elaborar políticas de Ciencia y Tecnología, teniendo como misión el impulsar y fortalecer las actividades de investigación científica, tecnológica y la innovación de calidad, así como el brindar asesoría al Ejecutivo Federal en dichos rubros, debiendo articular el Sistema Nacional de Ciencia y Tecnología para contribuir a que la sociedad mexicana enfrente con pertinencia sus principales retos y eleve su calidad de vida.

El Consejo Nacional de Ciencia y Tecnología, respecto al particular de los procesos de calidad de los programas educativos de posgrado que se imparten en las universidades e instituciones públicas de educación, ha implementado el Programa Nacional de Posgrados de Calidad (PNPC) el cual lo administra conjuntamente con la Secretaría de Educación Pública a través de la Subsecretaría de Educación Superior, estableciendo como misión de dicho programa "el fomentar la mejora continua y el aseguramiento de la calidad del posgrado nacional, que dé sustento al incremento de las capacidades científicas, tecnológicas, sociales, humanísticas, y de innovación del país"

En México, el hecho de que un programa educativo de posgrado obtenga la acreditación de calidad ante el PNPC de CONACYT, es muestra de que, habiendo pasado por todos los procesos de evaluación y desde luego satisfaciendo los alcances y parámetros respectivos, representa un reconocimiento público de sus características de excelencia educativa en beneficio no sólo de quien desarrolla sus estudios de posgrado, sino más aún, en beneficio de su entidad federativa y del Estado en general.

Un programa educativo de posgrado que pretende el ingreso al PNPC de CONACYT, debe satisfacer una serie de criterios que imponen una severa, estricta y muy rigurosa revisión: la estructura del programa educativo en el que se considera el plan de estudios y el proceso enseñanza – aprendizaje; otro criterio que es motivo de evaluación es el que se refiere a las características de los estudiantes que cursan sus estudios en este tipo de programas educativos, en los que se considera los requisitos de ingreso al programa educativo, la trayectoria escolar de los estudiantes, la movilidad e intercambio de estudiantes, los programas de tutorías y de becas; constituye un tercer criterio el relativo desde luego al personal académico en el que es evaluado el núcleo académico básico, así como las líneas de generación y/o aplicación del conocimiento en que ellos participan;

por otra parte es motivo de revisión el criterio que se refiere a la infraestructura y servicios, así como la implementación y uso de las tecnologías de la información y la comunicación; un criterio más es el referente a los resultados en los que se hace la evaluación sobre la trascendencia, cobertura, evolución del programa, seguimiento de egresados, la eficiencia terminal y la contribución al conocimiento; por último, se considera también la vinculación de la institución y del programa educativo con otros sectores de la sociedad; es también necesario destacar que todo programa educativo de posgrado que pretenda su ingreso al PNPC de CONACYT, debe contar de manera necesaria con un plan de mejoras en el que debe existir una adecuada congruencia entre los objetivos y las metas de dicho plan, así como el reconocimiento de las fortalezas y debilidades del programa. De manera paralela a la política instrumentada mediante las acciones concretas del CONACYT para el logro de entre otras metas, la calidad en la educación superior, en específico en los programas de posgrado que son precisamente sobre los que centra esta institución nacional sus esfuerzos y estrategias, "se puso en marcha en 1996 una política expresa mediante el Programa de Mejoramiento del Profesorado (PROMEP)(Reséndiz Núñez, Daniel (2000), *Futuros de la Educación Superior en México*, 1<sup>a</sup>. ed, Ed, Siglo XXI, México, p. 35.)

Este programa de Mejoramiento del Profesorado, que constituye una estrategia significativa implementada por el Estado Mexicano por conducto de la Secretaría de Educación Pública, toma como eje central para incrementar la calidad de la educación superior, la figura del profesorado, en virtud de considerar que de su actuación depende la efectividad y factibilidad de todas las demás acciones de apoyo en relación con la calidad, incluyendo en su función, no sólo la adopción de métodos y medios de enseñanza apropiados, sino también su participación en el diseño de los programas educativos y de su desarrollo como investigador.

"El Promep se propone simplemente implantar en nuestro medio los estándares que para el profesor de carrera han probado ser en todo el mundo la mejor garantía de calidad: formación académica completa en su especialidad, demostrado por haber obtenido el máximo grado (doctorado), aunque ésta no es condición suficiente, sino solamente necesaria. El Promep también busca que todo profesor de carrera, de acuerdo con los mismos estándares internacionales, distribuya su tiempo apropiadamente entre las cuatro actividades características de un profesor de educación superior: la docencia, la investigación, el tutelaje o asesoría a estudiantes para apoyarlos individualmente en el logro de altos niveles de aprendizaje, y el trabajo profesoral colegiado para atender colectivamente todos los asuntos relacionados con la conducción académica de los programas educativos de los que son responsables"((Reséndiz Núñez, Daniel (2000), *Futuros de la Educación Superior en México*, 1ª. ed, Ed, Siglo XXI, México, p. 35.)

La política implementada en la educación superior en México mediante las estrategias propuestas por el Promep, han sido aceptadas de buena manera por todas las universidades públicas del país, siendo el caso que en el año de 1997 se acordó que toda vacante en este tipo de instituciones educativas, sería cubierta con nuevas plazas sólo con el profesorado que contara con los elementos estándares dispuesto por el Promep. Las acciones implementadas en México tendientes a elevar el nivel de la calidad de la educación superior en México mediante las políticas propuestas por el CONACYT y mediante las respectivas del Promep, a la fecha siguen vigentes y en realidad puede aseverarse han contribuido con eficacia para impulsar los procesos de calidad planteados.

#### METODOLOGÍA

La investigación metodológicamente se encuentra delimitada al estudio de caso de los programas educativos de Maestría en Derecho y de Doctorado en Derecho y Globalización que se ofertan e imparten actualmente en la División de Estudios Superiores de Posgrado de la Facultad de Derecho y Ciencias Sociales de la Universidad Autónoma del Estado de Morelos, la cual forma parte de las Universidades Públicas que con plena autonomía operan en México.

La delimitación se ha hecho al estudio de caso referido por dos razones, la primera de ellas, por la necesidad metodológica de evitar la dispersión en la investigación y, en segundo término, por contar el suscrito con la experiencia personal en el proceso de certificación de calidad Nacional de dichos programas educativos, dado que me encuentro involucrado de manera directa en la creación y seguimiento de todas las acciones y estrategias que han sido necesarias para posicionar estos programas educativos en el Padrón Nacional de Posgrados de Calidad (PNPC) del Consejo Nacional de la Ciencia y Tecnología (CONACYT) en virtud de desempeñarme como decano de la citada División de Estudios Superiores de Posgrado de la Facultad de Derecho y Ciencias Sociales de la Universidad Autónoma del Estado de Morelos y, por mi calidad de investigador de Tiempo completo en dicha institución.

La investigación que se hace, se reitera, bajo el método de caso, expone por una parte las estrategias tomadas para el ingreso y permanencia de los referidos programas educativos al PNPC de CONACYT, por otra parte, dicha investigación pretende determinar y poner de manifiesto, si dichas estrategias y acciones adoptada por la División de Estudios Superiores de Posgrado de la Facultad de Derecho y Ciencias Sociales de la Universidad Autónoma del Estado de Morelos, se ajustan de manera coherente, suficiente y adecuadamente a los recomendaciones emitidas por la UNESCO en "Declaración Mundial sobre la Educación Superior en el Siglo XXI: Visión y Acción" pronunciada desde el año de 1998, para con ello poder emitir un juicio crítico por el cual se establezca si dichos programas educativos pueden ser considerados de calidad no solamente en el contexto nacional mediante la adecuada adopción de los lineamientos de calidad emitidos por el CONACYT, sino inclusive, si dicho programa de calidad a nivel internacional.

#### RESULTADOS

El programa educativo de maestría en derecho ofertado por la División de Estudios Superiores de Posgrado en la Facultad de Derecho y Ciencias Sociales de la Universidad Autónoma del Estado de Morelos, es un programa educativo que inicio su oferta educativa, en el año de 1991, siendo un programa de maestría de tipo profesionalizante que, tenía su orientación terminal en las áreas de derecho civil, derecho penal y, derecho social; dicho programa educativo operó sin modificación alguna desde su creación, 1992 y hasta el año de 2009, momento en el cual, las políticas educativas instrumentadas en la Universidad Autónoma del Estado de Morelos, con el fin de iniciar trabajos tendientes a la calidad de sus programas de posgrado, decidió dar por terminado dicho programa.

En dichas condiciones y con el afán desde luego de que continuara operando la División de Estudios Superiores de Posgrado de la referida Facultad de Derecho, se tomó la decisión de crear un nuevo programa educativo, el cual, teniendo como presunción el convertirse en un programa educativo de calidad, se diseñó atendiendo a los lineamientos y políticas educativas nacionales y de la propia universidad y cuidando dar cumplimiento a todas y cada una de las características que un programa educativo de posgrado debe de reunir para ser considerado de calidad y con ello lograr su ingreso al PNPC de CONACYT. El programa educativo una vez aprobado por el Consejo Universitario fue llevado a evaluación ante el referido órgano educativo federal, Consejo Nacional de la

Ciencia y Tecnología - CONACYT – el cual, una vez revisado y evaluada las características y constitución del programa educativo, lo aprobó como un programa nacional de posgrado de calidad, acreditación que se obtuvo en el mes de enero de 2010; ante la obtención satisfactoria del ingreso al PNPC de CONACYT del programa de maestría en derecho, la Facultad de Derecho y Ciencias Sociales y desde luego, el cuerpo de Profesores Investigadores de Tiempo Completo adscritos a la citada Facultad de Derecho, de plena conformidad y con el afán de contribuir con calidad a la formación del más alto nivel de los juristas del Estado de Morelos, y con el propósito de que los egresados de la maestría en derecho pudiesen continuar sus estudios hasta el grado de doctor, decidieron crear el programa educativo de

doctorado en derecho y globalización, el cual se creó adoptando todos los requerimientos que un programa doctoral debe observar para lograr su ingreso al PNPC de

CONACYT, siendo el caso que una vez aprobado por el Consejo Universitario, fue llevado a su evaluación ante el CONACYT para su ingreso al PNPC, logrando que en el mes de agosto de 2010 fuera evaluado y acreditado como un programa nacional de calidad.Una vez expuesto de forma genérica el ingreso de los programas educativos de la maestría en derecho y del doctorado en derecho y globalización ofertados por la División de Estudios Superiores de Posgrado de la Facultad de Derecho y Ciencias Sociales de la Universidad Autónoma del Estado de Morelos al CONACYT y acreditados ante el PNPC de CONACYT, metodológicamente es el momento oportuno para determinar si las estrategias y acciones emprendidas por la División de Estudios Superiores de Posgrado de la Facultad de Derecho y Ciencias Sociales de la Universidad Autónoma del Estado de Morelos, cumplen con las recomendaciones emitidas por la UNESCO en la "Declaración Mundial sobre la Educación Superior en el Siglo XXI: Visión y Acción" para poder considerar entonces, si dichos programas educativos podrían llegar a ser considerados como programas de calidad internacional.

Ha señalado la UNESCO en el artículo 11 de la referida Declaración Mundial sobre Educación Superior, que la evaluación de calidad de un programa educativo de nivel superior debe considerar que "a) La calidad de la enseñanza superior es un concepto pluridimensionalque debería comprender todas sus funciones y actividades. Una autoevaluación interna y un examen externo realizados con transparencia por expertos independientes. Deberían crearse instancias nacionales independientes, y definirse normas comparativas de calidad, reconocidas en el plano internacional.

Con miras a tener en cuenta la diversidad y evitar la uniformidad, debería prestarse la atención debida a las particularidades de los contextos institucional, nacional y regional. Los protagonistas deben ser parte integrante del proceso de evaluación institucional; b) La calidad requiere también que la enseñanza superior esté caracterizada por su dimensión internacional: el intercambio de conocimientos, la creación de sistemas interactivos, la movilidad de profesores y estudiantes y los proyectos de investigación internacionales; y, c) Para lograr y mantener la calidad nacional, regional o internacional, ciertos elementos son especialmente importantes, principalmente la selección esmerada del personal y su perfeccionamiento constante, en particular mediante la promoción de planes de estudios adecuados para el perfeccionamiento del personal universitario, incluida la metodología del proceso pedagógico, y mediante la movilidad entre los países y los establecimientos de enseñanza y de educación superior y el mundo del trabajo, así como la movilidad de los estudiantes en cada país y entre los distintos países. Las nuevas tecnologías de la información constituyen un instrumento importante en este proceso debido a su impacto en la adquisición de conocimientos teóricos y prácticos.

Las recomendaciones emitidas por la UNESCO en la citada Declaración Mundial sobre Educación Superior han sido consideradas, observadas y cumplidas por los programas educativos de mérito, al respecto en principio debe destacarse que el programa educativo tanto de maestría en derecho como el del doctorado en derecho y globalización, han sido autoevaluados de forma interna y evaluados por un órgano externo independiente, que es el CONACYT.

Ambos programas educativos atienden las propuestas pedagógicas actuales y por tanto se centran en el aprendizaje por competencias (La expresión competencias es un término polisémico que puede entenderse como el desempeño o la actuación integral del sujeto, lo que implica conocimientos factuales o declarativos, habilidades, destrezas, actitudes y valores, dentro de un contexto ético. La competencia emerge de la intersección entre los conocimientos factuales y declarativos (saber conocer), habilidades y destrezas (saber hacer), y actitudes y valores (saber ser) Para mayor información *véase* Pimienta Prieto, Julio H. (2012), *Las competencias en la Docencia Universitaria*, 1<sup>a</sup>. ed. Ed. Pearson, México, p. 2.), el primero de ellos es de tipo profesionalizante y el respectivo al doctorado en derecho y globalización es un

programa educativo por investigación; en ambos programas se consideran los aspectos de flexibilidad y movilidad estudiantil, en la actualidad son varios los estudiantes tanto de maestría como de doctorado que han salido ya a instituciones educativas de diversos países realizado estancias de investigación en universidades extranjeras, como son en España, Francia, Colombia, Chile, Uruguay, Costa Rica y Estados Unidos, sobre dichas acciones de movilidad es necesario también destacar que no sólo ha sido a cargo de los estudiantes, también el profesorado ha desarrollado estancias de investigación en el extranjero.

Por otra parte, el ingreso a los respectivos programas educativos implementan rigurosos requisitos, en los que se incluyen, además de un promedio mínimo en los estudios que anteceden y desde luego, el encontrarse titulados, la aprobación de un curso propedéutico y la aprobación de un examen general de conocimientos y de comprensión y redacción, así como de un examen psicopedagógico y, desde luego una entrevista individual con un comité de selección en que es evaluado el perfil del estudiante y su protocolo de investigación (para el programa educativo de la maestría en derecho); y sobre el programa de doctorado en derecho y globalización, todo aspirante debe acreditar un examen donde se evalúa la comprensión de texto y redacción de una legua extranjera, así como además de contar con el grado de maestro y un promedio mínimo, una entrevista ante el comité de selección en el que es evaluado de la misma forma, la calidad del protocolo de investigación, sobre el cual es importante precisar, la investigación debe desarrollarse bajo el contexto de la globalización y debe cumplir con todos los requisitos rigurosos que metodológicamente un protocolo de investigación para el ingreso a un doctorado debe de cubrir.Es conveniente anotar que el núcleo académico básico que participa en ambos programas educativos, deben ser doctores en derecho, así como contar con perfil

Promep, esto es, haber acreditado todos los requisitos que un Profesor Investigador de Tiempo Completo requiere para ser considerado como tal. Además, todos ellos son investigadores que dentro de su línea desarrollan trabajos de investigación, de innovación y generación de conocimientos, que publican libros y también se desarrollan dentro de la movilidad a diversas universidades en el extranjero, tanto con estancias de investigación, como con su participación como conferencistas y ponentes en congresos internacionales relacionados con su línea de investigación, aunado a esto, debe destacarse que se trata de investigadores que en lo que respecta a su actividad en la docencia, se encuentran ampliamente certificados pues se desempeñan tanto a nivel de la licenciatura, como de la maestría y del doctorado, lo que da garantía de su amplia experiencia en la docencia en los tres niveles de la educación superior en México. Los estudiantes de ambos programas educativos, al estar acreditados dichos programas ante el PNPC de CONACYT, obtienen una beca mensual que para el caso de la maestría en derecho se cuantifica en el equivalente a 4.5 salarios mínimos general vigente para el

Distrito Federal, por tanto, considerando que el salario mínimo diario vigente en el Distrito Federal asciende actualmente a la cantidad de \$62.33 que multiplicado por 30 días importa la cantidad mensual de \$1,869.90 luego entonces, la beca mensual que reciben los alumnos de la maestría en derecho corresponde a la cantidad de \$8,414.55 cantidad que en dólares americanos al tipo de cambio vigente en México corresponde aproximadamente a la cantidad de 650 USD; en el caso de los estudiantes del doctorado la beca mensual que reciben corresponde al importe de 6 salarios mínimos general vigente en el Distrito Federal, que asciende a la cantidad de \$11,219.40, esto es, aproximadamente 860 USD, beca que permite en dichas condiciones que los estudiantes sean de tiempo completo.

La División de Estudios Superiores de Posgrado desarrolla trabajos de vinculación con los sectores productivos tanto públicos como privados mediante la concertación y celebración de convenios académicos de colaboración que permiten que tanto estudiantes como docentes puedan desarrollarse en dichos espacios mediante su participación en Congresos, Coloquios, Diplomados y demás, así como para desarrollar trabajos de investigación y de publicación, esta vinculación no sólo se procura con instituciones nacionales, sino que se trabaja también con instituciones del extranjero como son en la actualidad, la firma de convenios con universidades extranjeras.

Se cuenta también con un programa de seguimiento de egresados que tiene como fin principal, el obtener la satisfacción del egresado en su vida profesional como producto de sus estudios de posgrado, así como el obtener también la satisfacción del empleador con el actuar de un egresado de un programa educativo de calidad. Es también importante señalar que ambos programas educativos son revisados constantemente y llevados a su actualización mediante reestructuras de los planes y programas de estudios, lo que permite estar vigentes tanto en los aspectos pedagógicos como en los relativos a las nuevas corrientes y doctrinas de los conocimientos jurídicos, además con dicha reestructuración se logra solventar las limitaciones y deficiencias que en la marcha se detectan en la operatividad del programa educativo.

Debe agregarse que las tecnologías de la información y de la comunicación se implementan en la labor educativa y por último cabe señalar que a pesar de que la Universidad Autónoma del Estado de Morelos trabaja con un presupuesto reducido, de manera constante se realizan obras de la infraestructura, de las instalaciones y de su equipamiento con el fin de mantener en buen estado las instalaciones.

En atención al estudio particular de las condiciones en que se ha desarrollado la División de Estudios Superiores de Posgrado, de las acciones y estrategias adoptadas y de que en su mayoría atienden a los requisitos, observaciones y recomendaciones emitidas por la UNESCO en la Declaración Mundial sobre Educación Superior, es correcto aseverar que los programas educativos de posgrado que se ofertan actualmente, maestría en derecho y doctorado en derecho y globalización, ambos pueden considerarse como programas de calidad no sólo en el ámbito nacional que ya se encuentran así certificados por el órgano evaluador competente, sino que también en el ámbito internacional pues se cumple de buena medida con dichas recomendaciones.

#### CONCLUSIONES

La División de Estudios Superiores de Posgrado de la Facultad de Derecho y Ciencias Sociales de la Universidad Autónoma del Estado de Morelos, está realizando un trabajo serio, con atención y dedicación para continuar formando parte del PNPC de CONACYT, no por el simple hecho de formar parte de los programas nacionales de calidad, sino que en realidad, porque ello impone en beneficio de los estudiantes, la existencia de un programa educativo que se avoca a cumplir con todos los requisitos necesarios para lograr la excelencia y la calidad educativa, lo que les garantiza, a estudiantes y comunidad en general, la formación de profesionistas que con una amplia solvencia en sus conocimientos, con grandes competencias para desarrollarse en los diversos espacios laborales que la sociedad reclama y con un alto grado de convicción de los deberes que como profesionales del derecho deben asumir en beneficio del desarrollo humano. La misión de la universidad hoy debe enfrentar nuevos retos, no se trata exclusivamente de formar profesionistas para la actividad laboral. "Si queremos que la escuela forme individuos con capacidad de pensar por sí mismos, de encontrar un sentido al mundo en que viven y a su propia vida, individuos que se desarrollen al máximo en sus capacidades, que cooperen con los otros, tenemos que adecuar la escuela a esos fines, para lo que necesita el cambio radical. Una reflexión sobre los fines de la educación es una reflexión sobre el destino del hombre" (Delval, Juan2004, Los fines de la educación, 9ª ed. Ed. Siglo XXI, México, p. 88).

Las recomendaciones de la UNESCO en la Declaración Mundial Sobre Educación Superior, constituyen una aportación significativa para poder determinar si un programa educativo es de calidad, dichas recomendaciones tienen reconocimiento universal y además unifican los criterios que para evaluar la calidad educativa de un programa deben de ser considerados, lo que impide juicios subjetivos y unilaterales que además de todo, se alejan a una voluntad internacional puesta de manifiesto por los estados signantes de dicha declaratoria. Los programas de maestría en derecho y doctorado en derecho y globalización que han sido motivo de estudio sí logran adecuarse a tales recomendaciones en beneficio de una educación de calidad.

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# EVALUACIÓN DE LA COMPETITIVIDAD DE LOS RESTAURANTES DE COCINA INTERNACIONAL

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#### RESUMEN

La presente ponencia estudia la competitividad de las empresas cuyo giro es la preparación y venta de alimentos en establecimientos denominados restaurantes. La competitividad se mide a través de un cuestionario diseñado a partir del mapa de competitividad del Banco Interamericano de Desarrollo en el cual se incluyen las variables aseguramiento de la calidad, recursos humanos, innovación, tecnologías de información y comunicación y contabilidad y finanzas. La investigación se realizó con restaurantes de cocina internacional de la ciudad de Ensenada, México. Los resultados indican que en promedio los objetos de estudio tienen un nivel de competitividad medio, presentando oportunidades de mejora en todas las variables, pero principalmente en recursos humanos, a fin de que el capital humano aporte a las empresas su conocimiento y experiencia a favor de su competitividad.

PALABRAS CLAVE: Competitividad, Restaurante.

### ASSESSING THE COMPETITIVENESS IN INTERNATIONAL CUISINE RESTAURANTS

#### ABSTRACT

This work studies the competitiveness of the enterprises of preparation and sale of food, in the international cuisine known as restaurants. The competitiveness is measured by one questionnaire survey designed by the map of competitiveness from the IDB that includes QA, Human Resources, Innovation, Information and Communication Technology and Accountant and Finance. This Research was done with International Cuisine Restaurants of Ensenada, Mexico. The results indicate that in average, the subjects of this study have a half level of competitiveness, presenting opportunities of improvement in all variables but mainly in Human Resources, so that human capital contribute to the companies with their knowledge and experience for competitiveness.

**JEL:** M19

**KEYWORDS:** Competitiveness, restaurants

#### INTRODUCCIÓN

La Industria Restaurantera en México está representada por 345,000 establecimientos registrados formalmente en la Cámara Nacional de la Industria Restaurantera y de Alimentos Condimentados (CANIRAC), que opera en todo el país, de los cuales el 95% son micro, pequeñas y medianas empresas (CANIRAC, 2010).De acuerdo con CANIRAC (2010), lo que afecta a la industria restaurantera en México está conformado por diversos aspectos que a continuación se mencionan: leyes locales y federales para la reducción de consumo de tabaco con su entrada en vigor en el año 2008 (según estadísticas el 98% de los restaurantes a nivel nacional son locales no mayores a 150 metros cuadrados; lo que no permite tener áreas especificas para no fumadores y fumadores); la recesión económica mundial de 2009 que se reflejo en una disminución del 11.7% de las ventas; la emergencia sanitaria por la influenza AH1N1 de mayo de 2009 que ocasionó la caída de las ventas en un 60%. En ciudades como México, Cancún,

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Cozumel, San Luis Potosí y Los Cabos la disminución fue del 90% y se estima que cerraron alrededor de 6,000 establecimientos; la inseguridad y el incremento de la delincuencia, con fuerte impacto en estados como Chihuahua, Baja California, Sinaloa, Guerrero, Nuevo León y Michoacán, que además de la baja de ventas, originó el cierre de restaurantes; la informalidad e ilegalidad toleradas, se estima que existen 700 mil puestos de comida en este rublo; aumentos en las cargas tributarias en los años 2009 y 2010 como el Impuesto Empresarial de Tasa Única (IETU) y el Impuesto a los Depósitos en Efectivo (IDE); por último, la deducibilidad de comidas de negocios en restaurantes de solo el 12.5%, cuando en los Estados Unidos de Norteamérica y Canadá se permite el 50% (CANIRAC, 2010).

A pesar del escenario adverso de los últimos años, la industria restaurantera en el país genera 850,000 empleos directos y 2.2 millones de empleos indirectos. Representa el 2.2% del Producto Interno Bruto (PIB) nacional con un valor estimado de \$140 mil millones de pesos y cerca del 23% del PIB Turístico (Instituto Nacional de Estadística y Geografía, 2009).Baja California (B.C.) en el área de gastronomía ofrece un calendario de eventos anual en donde existe una vasta riqueza gastronómica que rescata la cocina tradicional del estado. La comida del mar, los mariscos frescos preparados en todas las modalidades imaginables, el pan, el rompope de Tecate, la comida china de Mexicali, la ensalada César de Tijuana, el chorizo de abulón de Isla de Cedros, los tacos de pescado y las fiestas de la vendimia de Ensenada, en donde se elabora el 90% de los vinos reconocidos en el país (Gobierno del Estado de Baja California, 2011).Además, en el estado se preparan olivas curtidas, aceite de oliva, mermeladas y quesos artesanales, son algunos de los productos de tradición dado que son maridajes; todos estos productos suelen acompañarse con las delicias del mar para dar origen a la cocina BajaMed, la cual es una síntesis de la cocina mediterránea con un colorido y picante toque de México, que se enriquece día a día con productos de los valles y costas de Baja California, como las verduras en miniatura, el mejillón, la langosta y el atún, todos productos con calidad de exportación.

En 2010 Ensenada contaba con 154 negocios registrados en el directorio de CANIRAC, 32 de ellos restaurantes de cocina internacional para los comensales del sector turismo.Por otra parte debe destacarse que al emprender un negocio en algunos casos, la toma de decisiones se realiza por medio de la intuición o por el deseo personal de crear una empresa como patrimonio familiar, pero no se hace algún estudio formal para determinar si ese negocio satisface realmente una necesidad social. Por este motivo, escasamente existen objetivos concretos de crecimiento a largo plazo. Esto es ejemplificado por la apertura de fondas, cenadurías y pequeños restaurantes que al poco tiempo de abrir, cierran afectando no sólo su propia economía, si no la de la sociedad de Ensenada, al dejar sin fuentes de empleo a los trabajadores que laboraban en ellas. En 2011Ensenada vio cerrar tres restaurantes considerados de cocina internacional, uno de ellos tenía más de 25 años de servicio. Considerando estos antecedentes se define como objetivo de la investigación medir el nivel de competitividad de los restaurantes de cocina internacional en la ciudad de Ensenada, B.C. con base al de Mapa de Competitividad del Banco Interamericano de Desarrollo (BID), utilizando el directorio de CANIRAC 2010, para definir a los objetos de estudio. Teniendo en cuenta que un restaurante de cocina internacional es aquel que ofrece platillos en su menú de comidas elaboradas en las ciudades importantes alrededor del mundo.

## **REVISION LITERARIA**

Para poder definir la competitividad es necesario determinar el nivel de análisis, como el espacio analítico en el cual agentes económicos se ubican de acuerdo a su nivel de agregación macro y micro (Lombana y Rozas, 2009). En el nivel macro se define a la competitividad cualitativamente a través de su rendimiento comercial, balanza de pagos, comportamiento de la tasa de cambio, entre otras medidas y cuantitativamente, a través de la actividad científica y tecnológica del país o los resultados de la investigación (Esser, Hillebrand, Messner y Meyer, 1996). El modelo conocido como competitividad sistémica se propuso como resultado de un debate dentro de la Organización para la Cooperación y el Desarrollo Económico (OCDE), el cual plantea cuatro niveles para explicar los elementos que permiten la

posibilidad de competir a las empresas en un determinado país. Estos niveles son: meta, macro, meso y micro (Esser, *et al*, 1996).

En nivel micro, son los sectores, empresas y productos en los que se evalúa la competitividad. Algunas formas de medir y definir la competitividad en este nivel, asumen la función de creación de bienestar (Garelli, 2007). La competitividad ha sido descrita por un gran número de autores, la mayoría coinciden en destacar la capacidad que tiene una empresa para generar ventajas competitivas de forma sustentable para producir bienes o servicios, siendo así capaz de actuar ante la rivalidad suscitada al relacionarse con otra empresa (Viedma, 1992; Álvarez y García, 1996).

La teoría de recursos y capacidades, de acuerdo con Grant (1996), es consistente con el enfoque propuesto en los trabajos de Roquebert, Phillips, Wesfall, (1996) y Camisón (2001); en donde se afirma que una empresa obtendrá éxito en los mercados al depender fundamentalmente de sus recursos y la forma en cómo los gestiona. De esta manera, es posible proponer que las ventajas competitivas de las empresas se basan en la gestión de sus recursos, sean estos tangibles, intangibles y humanos.

Los recursos tangibles están definidos por una adecuada gestión financiera (Álvarez y García, 1996). Además los recursos intangibles agrupan: recursos tecnológicos (Álvarez y García, 1996); innovación (Viedma, 1992; Donrrosoro et al., 2001); capacidades de marketing (Álvarez y García, 1996; Donrrosoro et al., 2001) y calidad (Camelo et al., 1999). En cuanto a los recursos humanos, estos se pueden agrupar en: políticas y procesos de dirección de recursos humanos (Yusuf, 1995; Camelo et al., 1999; Donrrosoro et al., 2001); capacidades directivas (Puig, 1996; Donrrosoro et al., 2001) y sistemas de información (Viedma, 1992; Donrrosoro et al., 2001).Según Rivas (1999), la competitividad se enfoca, no sólo en la producción y comercialización, sino que se centra en los aspectos conexos a ellas. Enfatizando que la competitividad es una característica interna al sistema empresa; y que una empresa se mantiene competitiva sólo si es capaz de adecuarse constantemente a las nuevas condiciones del entorno, el cual puede estar determinado por factores institucionales más que por la oferta y la demanda.

Existen muchos modelos para medir la competitividad, la propuesta del Mapa de Competitividad del BID está integrado por ocho áreas (variables), que son: planeación estratégica, aprovisionamiento, aseguramiento de la calidad, comercialización, contabilidad y finanzas, recursos humanos, gestión ambiental y sistemas de información (Saavedra, 2010). Este modelo se consideró como base para lograr el objetivo de la investigación, realizando una adecuación a las características del sector restaurantero. Seleccionado tres variables del mapa: aseguramiento de la calidad, recursos humanos, y contabilidad y finanzas; e incorporando las variables innovación y Tecnologías de la Información y Comunicación (TIC). La innovación se incorpora dada la necesidad de renovación de productos en el menú que deben realizar los restaurantes, y las TIC por su importancia para el control de las operaciones, y como herramienta de marketing al facilitar la comunicación con los clientes a través del uso de redes sociales.

## METODOLOGÍA

La investigación se define como cuantitativa, por el uso de la recolección y el análisis de datos para contestar preguntas de investigación y probar hipótesis establecidas, se usa la estadística para establecer con exactitud patrones de comportamiento en la población (Hernández, Fernández y Baptista, 2003).El método utilizado se define como hipotético-deductivo, dado que parte de una hipótesis, un razonamiento previo sobre la competitividad en los restaurantes, el cual va a ser verificado, Pelekais (2007). Se trata de una investigación correlacional, siendo pertinente destacar que los estudios correlacionales pretenden medir el grado de relación que existe entre dos o más conceptos o variables, en un contexto en particular donde la utilidad y propósito principal de este tipo de estudios es conocer cómo se comporta una variable conociendo el comportamiento de otras variables relacionadas (Hernández *et al*, 2003).

Considerando el concepto anterior, se puede determinar que la presente investigación de acuerdo con su finalidad y alcance, es de tipo correlacional, porque busca determinar si el aseguramiento de la calidad, la capacitación y motivación de los recursos humanos, la innovación en procesos, producto, organización y mercadotecnia, las tecnologías de información y comunicación y la contabilidad y las finanzas (variables independientes) influyen en el éxito competitivo de los restaurantes de cocina internacional (variable dependiente). Lo anterior se traduce en que específicamente para este estudio, se buscó observar el grado de relación entre los valores obtenidos en las cinco variables señaladas y la competitividad.

La recolección de la información inicio en junio de 2012 y finalizó en agosto del mismo año. El trabajo de campo consistió en aplicar una encuesta a los gerentes generales o a los dueños de los restaurantes de cocina internacional de Ensenada. La población seleccionada fueron los restaurantes de cocina internacional de la ciudad de Ensenada B.C. Como la población N=32 en principio se pretendió realizar un estudio poblacional, sin embargo al acudir a los establecimientos se encontró lo siguiente: tres habían cerrado y doce no accedieron a responder el cuestionario, por lo tanto la investigación se realizó con muestreo no probabilístico de sujetos voluntarios, cuya muestra n=17, es decir representa el 53.12% de la población.El cuestionario se diseño con 75 preguntas, se realizo un estudio piloto en tres restaurantes, se recibieron observaciones que permitieron mejorar el instrumento, al final el cuestionario incluyó 78 preguntas, divididas en cinco bloques, uno por variable. La fiabilidad del instrumento se calculo a través del coeficiente alpha de Cronbach obteniéndose un valor de 0,934 para todo el cuestionario. Los resultados de fiabilidad para cada uno de los bloques (preguntas por variable) con los cuales se miden las variables independientes se ilustran en la tabla 1.

Tabla 1: Variables y Alpha de Cronbach

Variable	Items	Alfa de Cronbach
Aseguramiento de la calidad	Preguntas 1-12	0.828
Innovación	Preguntas 13-33	0.806
Recursos Humanos	Preguntas 34-51	0.827
Tecnologías de Información y Comunicación	Preguntas 52-61	0.892
Contabilidad y Finanzas	Preguntas 62-78	0.759

La tabla muestra las variables independientes del instrumento utilizado, el número de preguntas para cada variable y el resultado de fiabilidad determinado con alfa de Cronbach. Fuente: Elaboración propia con datos de investigación de campo y apoyo de SPSS

Las variables anteriores se ubican en valores por arriba del 0.75, lo que significa que miden lo que deben medir. De acuerdo con Ruiz (1998) citado por Pelekais et al. (2007) las variables aseguramiento de calidad, innovación, recursos humanos, y TIC tienen un coeficiente de confiabilidad muy alto, mientras para la variable contabilidad y finanzas es alta.

## RESULTADOS

Primeramente se describe al objeto de estudio, indicando que los restaurantes en promedio tienen 12 años de funcionamiento, con desviación estándar de 9.906 años. En relación al gerente que atendió a responder la encuesta la estadística ilustra que en promedio tiene 9.47 años laborando para la empresa con desviación estándar de 9.69 años.En la tabla 2 se ilustran los resultados obtenidos por cada restaurante en cada una de las variables independientes. Respecto a la variable aseguramiento de la calidad, la calificación promedio se ubica en 52.41 puntos, es decir se ubica en el nivel de calidad aceptable; el 47% de los establecimientos de acuerdo a su evaluación se ubica en el nivel de alta calidad; el 29% de ellos se ubican con calidad media, y se destaca que solo un establecimiento obtuvo 38 puntos que lo ubica en el nivel de baja calidad.

					Contabilidad y
Restaurante	Calidad	Innovación	RH	TIC	Finanzas
1	60	88	86	50	80
2	49	61	70	31	56
3	50	86	71	38	61
4	57	90	68	44	75
5	38	79	61	33	63
6	55	81	77	40	79
7	52	80	70	37	66
8	52	80	69	39	63
9	49	78	69	38	61
10	51	64	70	28	61
11	55	73	59	24	66
12	55	80	72	28	61
13	52	80	70	38	66
14	54	78	66	45	71
15	44	72	65	37	67
16	56	75	47	31	65
17	62	89	81	48	78
Promedio	52.4117647	78.4705882	68.8823529	37	67

Tabla 2: Valoración de las	prácticas de los restauran	tes según variables

La tabla muestra los valores resultantes de medir las variables independientes con el instrumento. Los cuadros sombreados con gris ilustran los valores más bajos. Fuente: Elaboración propia con datos de investigación de campo

Respecto al tema de innovación, la calificación promedio alcanzó los 78.47 puntos, lo que significa que en general los restaurantes son innovadores, el análisis particular de los resultados indica que cinco restaurantes (29%) fueron evaluados con un nivel alto de innovación, doce de ellos (70%) se ubican con un nivel medio. En relación a la variable recursos humanos la calificación promedio es de 68.88 puntos, es decir se ubica en un nivel medio el manejo del personal con propósitos de competitividad. Particularmente destacan tres (17.6%) restaurantes que fueron evaluados con un nivel alto en Recursos Humanos, trece (76.47%) están trabajando con un nivel medio y solo uno de los restaurantes está trabajando con un nivel bajo, por lo que se determina que la variable tiene un área de oportunidad en los restaurantes. En el caso de las TIC cuatro (23.52%) restaurantes fueron calificados con un nivel alto; diez (58.82%) están trabajando con un nivel medio y tres (17.64%) están trabajando con un nivel bajo.

Lo que representa un área de oportunidad para utilizar distintas herramientas de hardware, software y comunicación para facilitar tanto la atención de comensales como el control de tareas e inventarios en el restaurante. Por último los resultados de contabilidad y finanzas indican que cinco (29%) de los restaurantes poseen un nivel alto en el manejo de esta variable; doce (70.58%) están trabajando con un nivel medio. Por lo que se determina que esta variable se ubica en el nivel medio a alto en relación a su contribución con la competitividad del restaurante. La suma de los resultados de cada una de las variables arroja la puntuación de la competitividad de cada restaurante, la cual se valora de acuerdo con el baremo de intensidad descrito en la tabla 3.

Tabla 3: Baremo de intensidad de la competitividad

Rango de puntuaciones	Nivel de competitividad
78-154	Pobre
155-232	Bajo
233-310	Medio
311-382	Alto

La tabla muestra los rangos de puntuaciones de la competitividad de acuerdo con la escala utilizada y el número de preguntas que tiene el cuestionario, con base en dichos rangos se establece el baremo de interpretación del nivel de competitividad que poseen los restaurante. Fuente: Elaboración propia con datos de investigación de campo y apoyo de SPSS.

La figura uno ilustra los resultados de la variable competitividad de los objetos de estudio, además incluye el nivel promedio, el cual se ubica en los 304 puntos, es decir los restaurantes tienen en promedio un nivel medio de competitividad. Ocho establecimientos tienen calificaciones por debajo del promedio, ello significa que tienen problemas de competitividad por lo que su operación se encuentra en riesgo.

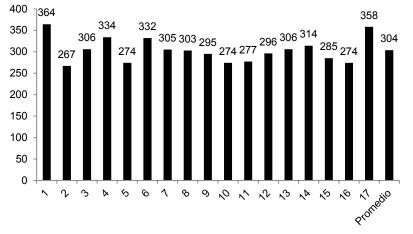
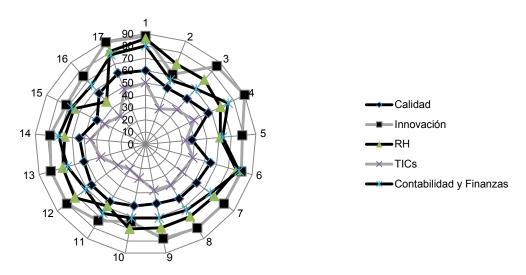


Figura 1: Nivel de competitividad en los restaurantes

La figura ilustra los resultados de competitividad medidos con el cuestionario de cada uno de los restaurantes, se omiten los nombres y en su lugar se presenta un número, que corresponde al presentado en la tabla 2. Fuente: Elaboración propia con apoyo del Excel.

La figura 2 ilustra los resultados de cada una de las variables respecto a la competitividad, el propósito de presentarla es para destacar que en apariencia la variable innovación es la que más contribuye al definir la posición competitiva del restaurante. Para comprobarlo se realiza un análisis de correlación.

Figura 2: Valoración de las variables de Competitividad en los restaurantes



La figura muestra los valores resultantes de medir las variables independientes con el instrumento. Destaca que la variable que menos impacta a la competitividad es la TIC y la que mayor impacta es la innovación. Fuente: Elaboración propia con datos de investigación de campo y apoyo de Excel

La tabla 4 ilustra los resultados de realizar el análisis de correlación a través del coeficiente Spearman Rho dado que las variables se midieron de forma indirecta y se uso una escala ordinal para su medición.

	Años de servicio	Calidad	Innovación	RH	TIC	Contabilidad y Finanzas	Competitividad
Años de servicio	1.000	198	.016	141	.254	.217	.002
Calidad	198	1.000	.569(*)	.305	.398	.629(**)	.619(**)
Innovación	.016	.569(*)	1.000	.549(*)	.709(**)	.526(*)	.867(**)
RH	141	.305	.549(*)	1.000	.406	.158	.565(*)
TIC	.254	.398	.709(**)	.406	1.000	.673(**)	.868(**)
Contabilidad y Finanzas	.217	.629(**)	.526(*)	.158	.673(**)	1.000	.740(**)

#### Tabla 4: Correlaciones entre variables

\* La correlación es significativa al nivel 0,05 (bilateral). \*\* La correlación es significativa al nivel 0,01 (bilateral). La tabla muestra los resultados del análisis de correlación utilizando el coeficiente Spearman Rho entre las variables independientes y dependientes. Ilustrando que existe una relación lineal directa entre ellas. Fuente: Elaboración propia con datos de investigación de campo y apoyo de SPSS

Los resultados de la tabla 4 indican que la variable calidad se relaciona con las variables innovación y contabilidad y finanzas; la variable RH (recursos humanos) sólo se relaciona con la variable innovación; la variable TIC se relaciona con las variables innovación y contabilidad y finanzas; mientras la variable competitividad se relaciona con todas las variables independientes, pero en menor medida con la variable RH y en mayor medida con la variable TIC.

## CONCLUSIONES

El presente estudio plantea que la competitividad en restaurantes se relaciona principalmente con cinco variables, las cuales son: innovación, recursos humanos, aseguramiento de la calidad, TIC y contabilidad v finanzas. La primera de ellas es muy importante para determinar la fidelidad del cliente, dado que se busca su asistencia continua para degustar platillos, lo cual al mismo tiempo no debe resultar monótono, por ello es preciso que los restaurantes de forma continua (por temporada) renueven su menú, a fin de ofrecer una amplia variedad a sus clientes. La variable recursos humanos pone de manifiesto la relevancia que tiene el capital humano en este sector, donde muchas veces se depende de un chef para mantener la calidad, presentación, sabor e inocuidad en los platillos. De ahí la relevancia de tener una adecuada gestión de los recursos humanos, donde se contemplen estrategias para su permanencia o suplencia en caso de que salgan de la empresa.Las TIC son otra variable de gran impacto en la competitividad, considerando l desarrollo y penetración de las redes sociales las empresas en general y en específico los restaurantes debieran incluirlas dentro de sus estrategias de mercadotecnia y publicidad. También se deben usar herramientas para tener un mejor control de inventarios dado que muchos insumos y materias primas son perecederos. Respecto a los resultados de valorar la competitividad puede inferirse que en general los restaurantes de cocina internacional de Ensenada, B.C. son competitivos, pero deben trabajar en las áreas de oportunidad que les presentan las variables a fin de consolidar su permanencia en el mercado

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# LA GESTIÓN FINANCIERA COMO FACTOR DE COMPETITIVIDAD PARA LAS PYMES FAMILIARES EN LA INDUSTRIA TEXTIL EN YUCATÁN, MÉXICO

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## RESUMEN

Este trabajo tiene como objetivo analizar las principales diferencias en la gestión financiera en las pymes familiares y no familiares de la industria textil del estado de Yucatán, considerando variables como: financiación, endeudamiento, rentabilidad, crecimiento, utilización de información contable y financiera, implementación de los sistemas de control de gestión (SCG) y rendimiento; como factores estratégicos y sostenibles de competitividad empresarial, considerando el marco de la Teoría de la Agencia (Fama, 1980), que identifica que las empresas familiares sufren menos los costes de la agencia porque la propiedad y la gestión están en poder de la familia; en la Teoría de la Jerarquía Financiera (Myers y Majluf, 1984; Holmes y Kent, 1991), que establece un orden al decidir por las fuentes de financiación a contratar; así como de la Teoría de la Contingencia, que se basa en el estudio de los sistemas de los SCG de las empresas y su rendimiento (Otley, 1980; Weill y Olson, 1989; Tiessen y Waterhouse, 1983; Chenhall, 2003). El estudio será cuantitativo, correlacional, a través del método de análisis de la varianza (ANOVA), no experimental, transversal, para la obtención de la información se aplicará un cuestionario que se diseñará específicamente para obtener la información a analizar.

PALABRAS CLAVE: Empresa familiar, gestión financiera, industria textil.

## FINANCIAL MANAGEMENT AS A COMPETITIVE FACTOR FOR SMES FAMILY IN THE TEXTILE INDUSTRY IN YUCATAN, MEXICO

## ABSTRACT

This paper's objective is to analyze the main differences in Financial Management in the family and nonfamily Small and Medium Enterprises (SME's) in the textile industry, considering variables such as: finance, debt, profitability, growth and use of accounting and financial information, implementation of the management control systems (MCS) and performance; as strategic and sustainable factors of business competitiveness, considering the agency theory for this purpose (Fama, 1980), which identifies that family enterprises have fewer agency costs because ownership and management are held by family members; in the financial hierarchy theory (Myers y Majluf, 1984; Holmes y Kent, 1991), which establishes a specific order to decide which funding sources will be hired, as well as the Contingency Theory which is based on the study of the SCG systems of the business and its performance. (Otley, 1980; Weill y Olson, 1989; Tiessen y Waterhouse, 1983; Chenhall, 2003). The study will be quantitative, correlational, using an analysis of variance (ANOVA), it is non-experimental, cross-sectional and in order to obtain information which will be analyzed, a questionnaire will be designed and applied.

## **JEL**: G00

KEYWORDS: Family business, financial management, Textile Industry.

## INTRODUCCIÓN

Según Ruelas (2008) citado en Esparza, García-Pérez y Duréndez (2010), más del 95% de las empresas en América Latina son Pequeñas y Medianas Empresas (pymes), de las cuales señala Belausteguigoitia (2010), que nueve de cada diez pymes son familiares, sin embargo este mismo autor menciona que lamentablemente una de las características de las empresas familiares, es que suelen tener una vida más corta que las no familiares. Pero que la gran mayoría de las empresas sean pequeñas no significa que para ellas no sea importante crecer. La historia de las empresas grandes demuestra que éstas fueron pequeñas, pero sólo en un principio. Según la información del Instituto Nacional de Estadística y Geografía (INEGI, 2004), se estima que en México existían 2.84 millones de empresas, de las cuales el 99.7% son pymes que generan el 42% del Producto Interno Bruto (PIB) y 64% del empleo, esto muestra el gran potencial que tienen las pymes para contribuir al crecimiento económico. Posteriormente el censo del INEGI (2010), reportó que la contribución de las pymes al PIB ha disminuido al pasar del 42% al 34.7%. Esta misma fuente menciona que las pymes contribuyen fuertemente con la generación de empleo en el país, debido a que mantienen el 71.9% de los empleos de las empresas del sector productivo.

En Yucatán existían 24,496 empresas de las cuales el 0.51% se trataba de empresas grandes de tal forma que el 99.49% del total de empresas del estado estaba representada por las pymes según el Sistema Empresarial Mexicano (SIEM, 2008). Cifra que incrementó a 28,554 empresas al siguiente año (SIEM, 2009). Para el municipio de Mérida, con los datos reportados por el SIEM (2008) existían 18,842 empresas, de las cuales las pymes representaban el 99.23% de las empresas meridanas. Diversos estudios empíricos han demostrado que existen diferencias de gestión entre las empresas familiares y las no familiares, las cuales deben investigarse a profundidad (Daily y Dollinger, 1993; Gallo, Tápies y Cappuyns, 2004; Laitinen, 2008). La gestión financiera es un tópico muy importante dentro de las empresas familiares, ya que ésta se encuentra influenciada por los objetivos que la familia tiene en la empresa, originando un efecto importante en su competitividad y permanencia en el mercado. En este sentido, estudios previos han analizado la estructura financiera (Romano, Tanewski y Smyrnios, 2000; la rentabilidad (Carney y Gedalovic, 2002; Anderson y Reeb, 2003), el crecimiento (Daily y Dollinger, 1993). La información contable como parte de la gestión financiera en las empresas familiares es esencial para que el gerente y su equipo de administración puedan tomar las decisiones más adecuadas en sus diferentes ámbitos de actuación. Diversos estudios indican que las empresas familiares utilizan en menor medida la información contable y financiera para la toma de decisiones comparado con las no familiares (Ho y Wong, 2001; Gallo, Tápies y Cappuyns, 2004; Collis y Farvis, 2002).

En cuanto a los sistemas de control de gestión (SCG), diversos estudios empíricos han demostrado que existen diferencias en la implementación de estos sistemas entre las empresas familiares y las no familiares (Daily y Dollinger, 1993; Kotey, 2005; Laitinen, 2008). El rendimiento de las empresas familiares, a través de la implementación y utilización de los SCG también juega un rol importante, en donde los SCG se convierten en herramientas prioritarias que los gerentes deberían adoptar para planear, presupuestar, analizar, medir y evaluar información útil para la adecuada toma de decisiones (Laitinen, 2008). Un informe elaborado por la Universidad Autónoma de Yucatán (UADY, 2011), señala que la crisis de la industria cordelera ha significado para Yucatán una disminución de la importancia del sector manufacturero en relación a otras actividades económicas. Así, la industria pasó de ocupar el 25% del PIB del estado de Yucatán en 1975, año en que aún tenía cierto peso la industria desfibradora y cordelera dedicada a la producción de cordel de henequén, a un 17% en 1980, a un 16% en 1985 y a un 14.2% en 2010. Es decir, que en 35 años la importancia de la producción industrial textil en la estructura económica global se ha reducido a la mitad. La importancia de la industria textil y del vestido en Yucatán se debe a su capacidad para generar empleos y ser una actividad que se presta al desarrollo de pequeños, medianos y micro empresarios. Así, en la industria textil y del vestido se ubicó en 2008 el 10.7% del total de las empresas manufactureras y representó el 24 por ciento del personal ocupado en la industria.

En ese subsector se otorgó el 29.8% de las remuneraciones totales de la industria y se obtuvo el 5% de la producción bruta total. En la industria del vestido se ubica uno de los sectores más fuertes vinculados a la pequeña y mediana industria y también al empleo de carácter informal y aleatorio, (INEGI, 2011).

El objetivo de este trabajo consiste en analizar las principales diferencias en la gestión financiera en las pymes familiares y no familiares de la industria textil del estado de Yucatán, tomando en consideración variables, tales como: financiación, endeudamiento, rentabilidad, crecimiento, utilización de información contable y financiera, implementación de los sistemas de control de gestión (SCG) y rendimiento, como factores estratégicos y sostenibles de competitividad empresarial. Para desarrollar este trabajo se realizará un estudio empírico de corte transversal del ejercicio 2011, con una muestra de 24 pymes de la industria textil yucateca, la cual estará integrada por pymes familiares y no familiares. Esta investigación se presenta organizada como sigue. En la sección de revisión de literatura se plantean los argumentos que sustentan los conceptos de gestión financiera, estructura financiera de las empresas familiares, fuentes de financiación, endeudamiento, rentabilidad, crecimiento, información contable y financiera y sistemas de control de gestión (SCG). Posteriormente se presenta la metodología que se aplicará, en donde se describe el procedimiento que se aplicará para la correlación de las variables con el fin de identificar su importancia en la competitividad en las pequeñas y medianas empresas (pymes) de la industria textil en el estado de Yucatán, México. Finalmente, se presentan los resultados esperados de la investigación, el alcance y las limitaciones.

## **REVISIÓN DE LITERATURA**

## Gestión Financiera

Burk y Lehnman (2004), señalan que la gestión financiera para las pequeñas y medianas empresas, puede resultar de interés para las mismas, dado que les pueden permitir permanecer y madurar dentro del tejido empresarial. La gestión financiera a largo plazo se ocupa, por consiguiente, de la realización de una planificación futura de la empresa buscando el modo de efectuar las inversiones adecuadas en activo fijo, de forma que se evite la infrautilización de éstas, controlando la rentabilidad generada por las mismas e intentando optimizarlas. Además, analiza la capacidad de la empresa para asumir deudas. Por otro lado, la gestión financiera a corto plazo se preocupa de la problemática relacionada con la financiación del activo circulante. Es decir, busca los fondos suficientes para hacer frente a las inversiones a corto plazo (existencias, deudores, tesorería), con el fin de que nunca se produzca ruptura en el ciclo de explotación, ya que el desfase posible entre cobros y pagos podría ocasionar flujos de caja negativos; de ahí la necesidad de disponer de recursos en tesorería. Hoy más que nunca la gestión financiera mantiene un protagonismo en la empresa y por eso se analizan cada una de sus variables: financiamiento, endeudamiento, rentabilidad, crecimiento, utilización de la información contable y financiera.

## Estructura Financiera De Las Empresas Familiares

Según Myers y Majluf (1984), la estructura financiera en las empresas familiares indica la forma en que se financian los activos de la empresa y se compone primordialmente de las diversas fuentes de financiación tanto internas como externas. La teoría de la jerarquía de las preferencias financieras (Pecking Order), establece la existencia de un orden en la elección de fuentes de financiación a contratar. Según esta teoría, lo que determina la estructura financiera de las empresas es la intención de financiar nuevas inversiones: En primer lugar, de manera interna con fondos propios; seguida con deuda privada de bajo riesgo como la bancaria y, en último lugar, con emisión de acciones. Estudios como el de Holmes y Kent (1991) encuentran que los gerentes financieros tienen un orden de preferencia de fondos acorde con la Teoría Pecking Order. Ellos observan una jerarquía restringida para las pymes y confían más en la deuda a corto plazo, en virtud de que emitir capital accionario no es una buen opción ya que no puede estar disponible o no interesa al propietario por temor a perder el control de la empresa; por tanto, las

El origen de esta preferencia está relacionado con el temor de la familia a perder el control de la empresa, cuando ésta no pueda liquidar la deuda o cuando entren nuevos inversionistas a formar parte del capital (Romano, Tanewsky y Smyrnios, 2000; Mishra y McConaughy, 1999). Ward (2001), muestra como de los fracasos de las empresas familiares, 10% se debe generalmente a la falta de recursos financieros. Romano, Tanewsky y Smyrnios (2000), explican que la principal fuente de financiación de las pequeñas empresas familiares, cuando comienza el ciclo de vida de la empresa o se planifica su crecimiento, se basa en la utilización de préstamos externos de los miembros familiares. Gregory, Rutherford, Oswald y Gardiner (2005), indican en un estudio realizado con pequeñas y medianas empresas de los Estados Unidos, que las pequeñas empresas son forzadas a obtener financiamiento interno (personal o de familiares), a aceptar los altos costos de los fondos y a utilizar alternativas de financiación a corto plazo.

## Rentabilidad

Existen diversos estudios en diferentes países que analizan la diferencia en la rentabilidad entre empresas familiares y no familiares. La teoría de la agencia dentro de la empresa familiar explica que este tipo de empresa sufre menos los costos de agencia porque la propiedad y la gestión están en poder de la familia, lo que origina mayor eficiencia en su rendimiento (Maury, 2006; Cabrera-Suárez, De Saá-Pérez y García, 2001). La rentabilidad es un aspecto primordial que las empresas deben considerar para mantenerse a largo plazo en los mercados competitivos. Mencionan que las empresas deberían ser más eficientes cuando existe una relación laboral entre propietarios y directivos, principalmente por los problemas de comportamiento oportunista del agente (gerente) respecto al principal (propietario) y los costos asociados con la supervisión del mismo. Por otra parte, Carney y Gedajlovic (2002), en un estudio realizado en Hong Kong con empresas familiares y no familiares notaron que las empresas controladas por la familia utilizan en forma más eficiente los recursos financieros, tienen mayor rentabilidad, mejor liquidez y distribuyen mayores dividendos que las no familiares.

Schulze, Lubatkin y Dino (2003), destacan que los beneficios generados en exceso por las empresas familiares son absorbidos por varias ineficiencias relacionadas con la familia. Kotey (2005), en un estudio realizado en Australia, comenta que las empresas familiares muestran mayores beneficios y márgenes netos, así como una mejor utilización de activos. En este sentido, Anderson y Reeb (2003) y Laitinen (2008), indican que las empresas familiares obtienen mayor rentabilidad que las no familiares.

## Crecimiento

El crecimiento de las empresas familiares se ve influenciado principalmente por los objetivos, las metas del negocio y las prácticas de gestión que persigue el grupo familiar y también por los diferentes resultados que generan en su respectivo desarrollo. Este planteamiento se basa en la teoría de la agencia que sugiere que los gestores ajenos a la familia persiguen objetivos personales diferentes a los que mantienen los propietarios de la empresa, de tal forma, que los directivos pueden anteponer el objetivo de crecimiento sobre el de rentabilidad (Fama, 1980).

En el Reino Unido, Cromie, Dunn, Sproull y Chalmers (2001), señalaron que existe un conflicto de intereses entre la eficiencia del negocio y el interés de las familias en la empresa, lo que da como resultado una baja en su crecimiento. Las empresas familiares prefieren mantener el control de la empresa aun si esto afecta negativamente el propio crecimiento de la empresa (Gallo, Tápies y Cappuyns, 2004). Laitinen (2008), en un estudio realizado a empresas familiares y no familiares de Finlandia, indicó que las empresas familiares consiguen menores niveles de crecimiento comparado con las no familiares, debido a que el objetivo principal de la familia es mantener el control de la propiedad de la empresa.

#### Información Contable Y Financiera

La información contable y financiera en las empresas familiares como parte integrante de su gestión, juega un papel muy importante en la toma de decisiones. Ho y Wong (2001), explicaron que las empresas familiares son menos transparentes cuando proveen información financiera y son más reacias a proporcionar voluntariamente información contable y financiera. La información financiera en las empresas familiares puede ser más parcial que en las no familiares. Collis y Farvis (2002), encontraron en un estudio realizado a pequeñas empresas del Reino Unido, que la principal fuente de información contable y financiera es la relacionada con el flujo de efectivo, los bancos y la información contable tanto mensual como cuatrimestral. Tong (2008), mencionó que la información financiera emitida por las empresas familiares es de mejor calidad que las no familiares, debido al horizonte de inversión a largo plazo y a la imagen y supervisión que la familia tiene en la empresa.

#### Sistemas De Control De Gestión

La Teoría de la Contingencia desde la perspectiva de los SCG establece que el rendimiento empresarial se encuentra influenciado por diversas variables contingentes como la estrategia, la estructura, el tamaño, el entorno, la tecnología y las tareas individuales; así como por variables relacionadas con la gestión, la implementación, la estructura y el desarrollo del sistema de información, que influyen en el rendimiento del propio sistema de información, en cuanto a satisfacción, éxito, efectividad e innovación (Weill y Olson, 1989). Otley (1980), menciona que el propósito primordial de los SCG es que no sólo deben basarse en una forma de control como las medidas de rendimiento, sino en múltiples sistemas de control trabajando de manera conjunta. Tiessen y Waterhouse (1983), corroboran que la estructura de una organización depende de la tecnología y el entorno, y mencionan que la efectividad de los procesos de gestión son un factor contingente que afecta la estructura organizativa. En este sentido, Chenhall (2003), analiza la alineación de diferentes variables como las técnicas de control contables y su impacto en el rendimiento de las empresas.

*Las pequeñas y medianas empresas en México:* La actual estratificación de las empresas en México corresponde al pronunciamiento publicado en el Acuerdo por el que se establece la estratificación de las micro, pequeñas y medianas empresas el 30 de junio de 2009 en el Diario Oficial de la Federación. (Ver tabla 1).

Tabla 1: Estratificación de empresas

Estratificación					
Tamaño	Sector	Rango de número de trabajadores	Rango de monto de ventas anuales (mdp)	Tope máximo combinado*	
Pequeña	Comercio Industria y Servicios	Desde 11 hasta 30 Desde 11 hasta 50	Desde \$4.01 hasta \$100 Desde \$4.01 hasta \$100	93 95	
Mediana	Comercio Servicios	Desde 31 hasta 100 Desde 51 hasta 100	Desde \$100.01 hasta \$250	235	
	Industria	Desde 51 hasta 250	Desde \$100.01 hasta \$250	250	

Fuente: Diario Oficial de la Federación 2009

Rodríguez y Zorrilla (2007), en un estudio sobre las pymes en España, Portugal y México señalan que las pymes tienen problemas en lo relativo al acceso al crédito bancario debido al alto grado de informalidad con el que operan. En definitiva el alcance y diseño de las regulaciones fomentan o restringen la actividad empresarial y con ello sus posibilidades de acceso al mercado de crédito, inversión, la productividad y el crecimiento. Los resultados de este trabajo arrojaron que en los tres países analizados, las pequeñas y medianas empresas juegan un papel crucial en sus economías, representando una proporción importante de las empresas, el empleo y la producción de los mismos, lo que las sitúa en un objetivo central de sus políticas de desarrollo. La autofinanciación constituye la principal fuente de financiación de sus

inversiones, producto de su mayor dificultad para acceder a los mercados crediticios. Las restricciones al crédito, junto la denominada informalidad y las dificultades para absorber nuevas tecnologías son los principales obstáculos para su desarrollo.

## METODOLOGÍA

Considerando el tipo de fenómeno que se investigará, se empleará el enfoque cuantitativo, correlacional, no experimental, transversal y se realizará un análisis de correlación de las variables a través del modelo de Análisis de Varianza (anova). El trabajo de Investigación se realizará con información que se obtendrá de las pymes de la industria textil del estado de Yucatán, del ejercicio 2011. Se utilizará un cuestionario diseñado específicamente para recabar la información que se desea analizar para esta investigación, con un escalamiento tipo likert. Con base en los datos proporcionados por la Secretaría de Fomento Económico (SEFOE, 2010), la población queda conformada por 26 empresas pymes del sector textil, del estado de Yucatán, por lo tanto el tamaño de la muestra deberá de ser al menos 24 encuestados. La fórmula que se utilizará para obtener el tamaño de la muestra es la de estimación de intervalo de la proporción poblacional finita.

*Modelo Estadístico Anova:* El análisis de la Varianza (anova) se aplicará para contrastar la hipótesis de dependencia lineal entre la variable dependiente y las independientes, comparándose la varianza explicada por el modelo y la varianza residual. Para probar la significancia del modelo global se utilizará la hipótesis nula de que no existe relación entre las diversas variables independientes consideradas como grupo y la variable dependiente. Se llevará un análisis de correlación de pasos hacia atrás para la selección de las variables a incluir en el modelo final. Se utilizará un nivel de significancia de 5%. La bondad del ajuste se mide por el Coeficiente de Correlación Múltiple (R), que varía entre 0 y 1, mientras que el Coeficiente de determinación es R2 y expresa la proporción de la varianza de la variable dependiente explicada. (Kazmier, 1998).

*Medición de la confiabilidad*:La confiabilidad se puede medir al aplicar un instrumento de medición dos o más veces a un mismo grupo de personas o aplicar dos o más instrumentos de medición a un mismo grupo en diferentes momentos. El método de mitades partidas requiere sólo una aplicación de la medición y compara puntuaciones de ambas partes que deben de estar muy correlacionadas. El coeficiente alfa de Cronbach requiere solamente una administración de medición para toda la población sin necesidad de dividirla. El método que se utilizará por las características de la investigación, será el coeficiente de cronbach.

*Instrumento de medición:* El método de escalamiento tipo Likert (Likert, 1976), consistirá en un conjunto de ítems presentados en forma de afirmaciones o juicios ante los cuales los sujetos elegirán uno de los cinco puntos de la escala. A cada punto se le asignará un valor numérico. Así, el sujeto obtendrá una puntuación total sumando las puntuaciones obtenidas en relación con todas las afirmaciones. Para la recolección de datos se deben realizar las siguientes actividades: seleccionar un instrumento o método de recolección, aplicar el instrumento seleccionado y preparar observaciones, registros y medición de los resultados obtenidos (Hernández, Fernández y Baptista, 2006). La medición definida por Stevens (2001), significa asignar números a objetos y eventos de acuerdo a reglas, y más propiamente cuando se evalúan comportamientos sociales se deben vincular conceptos abstractos con indicadores empíricos.

*Medición de la validez:* La validez del constructo se realizará con el procesamiento y análisis de datos de los ítems que integrarán cada variable del modelo, mediante el análisis de factor con el apoyo del paquete estadístico SPSS.

#### **RESULTADOS ESPERADOS**

Esta investigación pretende mostrar con la información obtenida de los cuestionarios que se aplicarán a los directivos o propietarios de las entidades, las principales diferencias en la gestión financiera en las pymes de la industria textil yucateca familiares y no familiares. De esta manera mostrar un panorama general de los diversos aspectos actuales que influyen en la competitividad de las pymes familiares de la industria textil en Yucatán y que sirvan de referencia para otros estudios, así como para otras empresas de diferentes sectores. Asimismo, deberá contribuir al enriquecimiento de la literatura existente relacionada con la investigación de la empresa familiar en el contexto mexicano en las pymes. Ya que de ésta manera, los gerentes podrán conocer y percibir la problemática que los aqueja. También, estos indicadores les servirán de orientación para que adopten mejores prácticas de gestión financiera y así permanezcan competitivamente en el mercado. De manera adicional, le permitirá a las instancias de gobierno mexicano informarse de la problemática de las empresas familiares y, en consecuencia, lograr el apovo dentro de las políticas públicas para coadyuvarlas con mejores incentivos y políticas gubernamentales que les permitan estimular el desarrollo económico. Finalmente a las Instituciones de Educación Superior, les será de utilidad para que actualicen tanto sus programas de estudio como sus programas de vinculación sobre temas relacionados con la gestión financiera de las empresas familiares. Pero, sobre todo, para que continúen promoviendo la generación y aplicación innovadora del conocimiento a través de sus profesores investigadores, grupo y/o redes de investigación.

## Alcance

La presente investigación permitirá analizar la gestión financiera en las pymes familiares de la industria textil en Yucatán como factor estratégico y sostenible en la competitividad empresarial para este sector.

#### Limitaciones

La aplicación total o parcial del contenido de esta investigación es responsabilidad única y absoluta de la población objeto de estudio, por lo que queda fuera de las manos del investigador comprobar el resultado final de su aplicación.

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## RESUMEN

En éste artículo de investigación se presentan los resultados del proyecto Análisis de comportamiento de los indicadores de rentabilidad por medio de la variación natural en las empresas del Sector Carbón en Colombia. En esta investigación se realiza inicialmente una descripción conceptual detallada relacionada con los indicadores rentabilidad, los gráficos de control, las causas comunes y causas asignables, la estabilidad de los procesos y la forma y uso de los gráficos de control, para analizar el comportamiento de los indicadores en los años 2006, 2008 y 2010. Lo anterior a través de una perspectiva cualitativa, descriptiva propositiva y cuantitativa. De la variación natural y los límites de control calculados se puede concluir que el sector presenta una variación natural estable para las empresas analizadas en el Sector en los años estudiados.

PALABRAS CLAVE: variación natural, límites de control, indicador, rentabilidad.

## ABSTRACT

This research paper presents the results of the project Behavioral analysis of profitability indicators by means of natural variation in Coal Sector companies in Colombia. In this research, there is initially a detailed conceptual description related with profitability indicators, control charts, common causes and assignable causes, the processes stability and the form and use of control charts to analyze the behavior of indicators in the years 2006, 2008 and 2010. This, through a qualitative, proactive and quantitative descriptive perspective. Of natural variation and calculated control limits it can be concluded that the sector has a stable natural variation for the analyzed companies in the sector in the years studied.

KEYWORDS: Natural variation, control limits, indicator, profitability.

## INTRODUCCIÓN

En éste artículo se desarrolló una metodología para analizar la Variación natural de los indicadores de rentabilidad del sector Carbón en Colombia por medio del concepto de gráfico de control por variables en las empresas del Sector, tomando para éste estudio aquellas empresas que presentaron sus estados financieros en la Superintendencia de Sociedades y la Cámara de Comercio de Colombia en los periodos 2006, 2008 y 2010. Para lo anterior se utilizaron los indicadores de rentabilidad con lo cual se evaluó el control del sector, mediante los gráficos de control detectando las modificaciones que se producen, de tal forma que se pudiera analizar el comportamiento de los indicadores financieros seleccionados.

## **REVISIÓN LITERARIA**

#### Indicadores De Rentabilidad

Ortiz (2011) argumenta, que los indicadores de rentabilidad, denominados también de rendimiento, sirven para medir la efectividad de la administración de la empresa para controlar el costo y el gasto, y de esta manera convertir las ventas en utilidades; como se muestra en la Tabla 1, ec. (1), (2), (3) y (4).

Tabla 1: Indicadores de rentabilidad

Indicador	Ecuación	Ecuación		
Margen bruto	$\frac{utilidad bruta}{ingresos operacionales} \times 100$	(1)		
Margen operacional	$\frac{utilidad\ operacional}{ingresos\ operacionales}  imes 100$	(2)		
Margen neto	$\frac{ganancias y perdidas}{ingresos operacionales}  imes 100$	(3)		
Utilidad operacional	margen de contribucion – costo fijo	(4)		

Esta Tabla muestra la relación para realizar el análisis de los indicadores de rentabilidad por medio de la variación en las empresas del Sector Carbón.

## Gráficos X y R

De la Fuente (2008) señala, que el grafico X - R analiza la media muestral y el rango de una muestra predeterminada. Para determinar si un proceso está o no bajo control conviene utilizar los dos gráficos conjuntamente. Mateus, Sirvent y Sagasta (2006) indica, que para construir el grafico X se representa gráficamente los límites de control de la media. Para construir el gráfico R, representaremos gráficamente los rangos de las sucesivas muestras, siguiendo la filosofía general del diseño de los gráficos de control.

## METODOLOGÍA

Esta es una investigación en donde se utilizó un análisis cualitativo, descriptivo propositivo y cuantitativo, soportada en los gráficos de control. Para contrastar si en tres periodos distintos se puede evidenciar la evolución de los indicadores de rentabilidad por medio de la variación natural en el sector analizado, para lo cual se estudiaron los rubros requeridos de las empresas del Sector Carbón en Colombia.

La población estuvo conformada por 31 empresas del Sector Carbón en Colombia que presentaron sus estados financieros entre el año 2006, 2008 y 2010. Se utilizaron los estados financieros de la Superintendencia de Sociedades (2008), y la Cámara de Comercio de las empresas seleccionadas, que proyectaron sus estados financieros del 2006, 2008 y 2010. Para calcular la variación natural de los indicadores estudiados, se calcularon los gráficos de control por medio de software SPSS statistics 19, aplicación con la cual se establecieron las medias, rangos y los limites de control.

## RESULTADOS

Calculo De Los Gráficos De Control X Y R Para Los Indicadores De Rentabilidad De Las Empresas Del Sector Carbón En Colombia

Al analizar el Sector Carbón en Colombia se puede concluir que el sector posee una variación natural en los resultados asociados a sus indicadores; las organizaciones que hacen parte de la variación natural o estabilidad del sector, se presenta en la Tabla 1.

Tabla 1: Empresas que hacen parte de la variación natural del proceso durante los años 2006, 2008 y 2010

empresas	margen bruto	margen operacional	margen neto	utilidad operaciona
comercializadora internacional norcarbon s a s	x	x		
drummond ltd	х	х		
masering Itda		х		х
industria carbonera del norte limitada	х	х		х
centromin s.a.	х	х		х
sanoha ltda. mineria medio ambiente y forestal		х	х	х
mineralex Itda	х	х	х	
servicios de mineria y dragados s.a s.m.d	x	х		
c.i. carbones suramericanos s. a.	х	х	х	
carbones de la jagua s a	х	х		х
geoexplotaciones Itda	х	х		
inversiones tomas s.a.	х	х	х	
carbones colombianos del cerrejon s.a.		х		
cerrejon zona norte s a		х		х
julyser gomez Itda		х		
minas la vega limitada	х	х		
uniminas limitada	х	х		
carbones del canada Itda		х		
columbia coal company s a	х	х		
c.i. guacheta coal Itda	х	х	х	
carboneras la ramada Itda	х	х		х
compañia minera el triunfo s a s		х		
consorcio minero de cucuta Itda	x	х		
carbones del cerrejon limited		х		
inducarbon Itda	x	x		
minas de rio claro Itda en acuerdo de reestructuracion	x	х	х	
industria de carbon del valle del cauca s.a. inducarbon	x	х	х	
carboneras elizondo s.a		х	х	
carbones san fernando s.a.	x	x	х	х
explotaciones carboniferas s a		х		
coal union production compani s.a.		х	х	

Esta Tabla señala las empresas que hacen parte de la variación natural del proceso en el transcurso de los periodos estudiados.

## CONCLUSIÓN

En el análisis de los indicadores de rentabilidad por medio de la variación natural de las empresas del Sector Carbón en Colombia desarrollado en ésta Investigación se utilizaron 31 empresas del Sector, de donde se pudo evidenciar a través del análisis estadístico que los indicadores seleccionados presentan estabilidad en sus resultados para el sector estudiado. En lo que respecta a los gráficos de control los valores estándar del proceso para el Margen Bruto es 269, rango de 116 y sus límites de control son L<sub>SCX0</sub> es 387, L<sub>ICX0</sub> es 150, Ls $\sigma_0$  es 297 y L<sub>I</sub> $\sigma_0$  es 0, el Margen Operacional presenta una media de 589, rango 159 y sus límites de control son L<sub>SCX0</sub> es 426, Ls $\sigma_0$  es 409 y L<sub>I</sub> $\sigma_0$  es 0, el Margen Neto tiene una media 1422, rango de 2545 y sus límites de control son L<sub>SCX0</sub> es 4026, L<sub>ICX0</sub> es 6550, Ls $\sigma_0$  es -1182 y L<sub>I</sub> $\sigma_0$  es 0 y la Utilidad Operacional tiene una media de 107602, rango de 531463 y sus límites de control son L<sub>SCX0</sub> es -251967, Ls $\sigma_0$  es 904504 y L<sub>I</sub> $\sigma_0$  es 0.

Es importante mencionar que en éste artículo se presenta un método y un conjunto de herramientas específico que permite realizar un estudio en donde se determina la evolución y estandarización de los indicadores de rentabilidad en las empresas del Sector Carbón en Colombia. Además se presenta una

explicación clara de las medias y rangos resultante para el sector en el transcurso de los años estudiados. Es importante señalar que estudios similares, Fontalvo, Mendoza y Morelos (2011) y Fontalvo, Morelos y De la Hoz (2011), han demostrado que el indicador Razón Corriente, es sensible y muestra mejora significativas en el sector estudiado.

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# ANÁLISIS CUANTITATIVO DE PATENTES EN MÉXICO

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## RESUMEN

La generación de patentes es un promotor de la innovación tecnológica y a su vez de la competitividad, por tanto resultan claves para el crecimiento y desarrollo económico de un país; dado que en una economía globalizada la competitividad es una condición básica de éxito. De ahí la importancia que, en este contexto, ha adquirido la protección de la propiedad intelectual. Este artículo pretende ilustrar el origen de la generación de patentes en México mediante un análisis de la relación que existe las patentes y diferentes indicadores. Para esto se utilizó un análisis de regresión lineal, con el cual se obtuvieron las variables más relacionadas con la solicitud de patentes en México. Finalmente, se llega a conclusiones de este estudio.

PALABRAS CLAVE: Patentes, inversión extranjera directa (IED), competitividad, I+D

# QUANTITATIVE ANALYSIS OF PATENTS IN MEXICO

## ABSTRACT

The patent generation is a technology innovation promoter and, at the same time, of the competitiveness, that is why they are keys for the growth and economical development of a country; as the competitiveness is a basic success ingredient in a globalized economy. This is where the intellectual property protection becomes very important. This article means to illustrate the origin of the patents generation in Mexico by analyzing the relationship between patents and different indicators. With the help of a linear regression analysis, we obtain the variables which contributed the most for the generation of patent applications in Mexico. Finally, some conclusions are presented.

## **JEL:** O32

KEYWORDS: Patents, foreign direct investment (FDI), competitiveness, R&D

## INTRODUCCIÓN

La innovación es indispensable para la viabilidad y el éxito de la economía moderna, por ende resulta indispensable proteger la innovación. Desde el punto de vista económico, se ha demostrado claramente que las empresas que poseen unos conocimientos técnicos especializados y comercializan productos de marca y productos o procedimientos patentados se encuentran en una posición más competitiva para incrementar o mantener sus cuotas de mercado (Comisión Europea, 1997). En la actualidad, la economía globalizada se enfrenta a múltiples desafíos, tales como la necesidad permanente de una mejora en la competitividad internacional pues ésta representa una condición básica de éxito.

La patente ocupa un lugar privilegiado dentro del conjunto de medios de que se dispone para proteger la innovación. De acuerdo a la Real Academia Española una patente es el documento en que oficialmente se le reconoce a alguien una invención y los derechos que de ella se derivan (Diccionario de la Lengua Española, 2010); al respecto la Ley de Propiedad Industrial (2010) señala que serán patentables las invenciones que sean nuevas, resultado de una actividad inventiva y susceptibles de aplicación industrial. Cabe mencionar que son varios los medios que sirven como propulsores a estos inventos; muy diversas son las motivaciones de las cuales se apoyan las personas de cuyas mentes nacen; sin embargo, existen

algunos factores generadores comunes en los países líderes: cultura de progreso, disciplina, trabajo en equipo, visión común hacia el futuro. Estos y otros factores pueden ser enfocados en algunos aspectos específicos, como los siguientes: la inversión extranjera directa, la contribución de las universidades con posgrados y los centros de investigación.

Por otra parte la generación de patentes promueve la innovación tecnológica y a su vez la competitividad. Cabe destacar que "el reporte global de competitividad 2011-2012" define a la competitividad como el conjunto de instituciones, políticas y factores que determinan el nivel de productividad de un país (World Economic Forum, 2011), en este contexto, el reporte publicado por el World Economic Forum en enero del 2012 en su índice de competitividad encontramos que México está ubicado en el lugar 58, todavía muy lejos de los sitios importantes. Por otra parte para el ex-primer ministro del Reino Unido, Tony Blair, la innovación, la explotación de nuevas ideas, es absolutamente esencial para salvaguardar y otorgar trabajos de alta calidad, empresas exitosas, mejores productos y servicios para los consumidores, y mejores procesos además de más sanos para el medio ambiente... El desafío es crear las condiciones en las que todas las empresas ponen la innovación en el centro de sus estrategias futuras (Blair, 2003).

Los países que destacan por ser altamente competitivos y por ende generadores de patentes, invierten muchos recursos a la investigación y desarrollo así como a crear una infraestructura que permite que sus científicos y tecnólogos jueguen un papel muy importante a nivel internacional. En este contexto, es conveniente preguntarse de dónde surgen las patentes en México; por tanto el objetivo de este estudio es responder a esta pregunta mediante el análisis de las diferentes fuentes de información que permitan encontrar las relaciones entre ciertos factores de generación de patentes, particularmente en cinco entidades de la república: Distrito Federal, Nuevo León, Estado de México, Jalisco y Puebla.Posterior a la introducción realizaremos una revisión de la literatura existente tratando de reconocer lo que otros autores han encontrado como determinantes. En la siguiente sección describiremos la metodología para realizar un comparativo de los datos obtenidos durante la revisión. Finalmente concluimos resaltando los elementos que consideramos de más trascendencia y mayor aporte al trabajo.

#### Estado Del Arte

La construcción de relaciones del número de patentes por el valor del gasto en investigación y desarrollo. Para comparar la propensión a patentar entre empresas y universidades o entre departamentos universitarios, por parte de Henderson et al. (1998) y Wallmark (1998), parece indicar que debe existir una relación entre patentes e I+D universitarias. Esa apreciación es especialmente relevante a la hora de plantear un modelo de factores determinantes de las patentes universitarias, puesto que remite inmediatamente a la relación entre patentes e I+D empresariales, que cuenta con cierta tradición en la literatura especializada desde los trabajos de Griliches y su equipo en la década de 1980.

#### Modelos De Patentes Universitarias

En el caso de las universidades, Meyer-Krahmer y Schmoch (1998) detectan que tales oportunidades tecnológicas pueden encontrarse en campos fuertemente basados en la ciencia (biotecnología, medicina, tecnologías de la información y telecomunicaciones), donde la innovación tiende a seguir un proceso más secuencial, o en otras de particular aplicación industrial (ingeniería mecánica), aunque en este caso resulta difícil identificar sistemáticamente de cuáles se trata.Se puede asumir también que las unidades de investigación más grandes patenten más, simplemente porque cuenten con más personal dedicado a ello. En el caso de las empresas, se puede ver el empleo del número de empleados como variable de control en trabajos como el de Bound et al. (1984). En el caso de las universidades, Wallmark (1998) compara las solicitudes de patentes con el número de profesores de cada disciplina. Henderson et al. (1998) realizan un ejercicio semejante, aunque utilizan de nuevo el gasto en I+D como variable aproximativa de la dimensión de los departamentos. El tamaño, pues, parece que debe aparecer en el modelo propuesto, este

describe una serie de características personales de los inventores que pudieran estar relacionadas con aquéllas: edad, categoría universitaria y sexo. Detecta que la mayoría de inventores en la Chalmers University of Technology cuenta entre 30 y 35 años, si bien entre los profesores eméritos se da una especial propensión a patentar, y que hay muy pocas mujeres inventoras. Henderson et al. (1998) señalan tres factores que pueden influir en las patentes universitarias:

a) El marco legal, ya que el crecimiento que observan surge a raíz de que en 1980 y 1984 los grandes cambios de la ley federal –plasmados en el Acta Bayh-Dole- hicieron más fácil para las universidades el retener los derechos de propiedad derivados de la investigación financiada por fondos federales.

b) La creciente financiación empresarial de la investigación universitaria, probablemente como respuesta al interés creciente de las universidades por la investigación aplicada, que aumenta los recursos para estas actividades y por tanto contribuye al aumento de patentes.

c) El incremento sustancial de las entidades de interfaz de las universidades (como oficinas de transferencia de tecnología o fundaciones universidad-empresa), que fomentan la protección de los derechos de propiedad de la I+D como modo idóneo de incrementar la interacciones con las empresas. En el mismo tenor, Santoro y Chakrabarti (1999), identifican varios patrones para la construcción de las relaciones entre la industria y los centros universitarios de investigación, como la adquisición de conocimientos, tener acceso a las instalaciones universitarias, políticas universitarias flexibles con respecto a la propiedad intelectual, como son las patentes y licencias, entre otros.

## Patentes Y Progreso Tecnológico 1971-1993

José María Ortiz Villajos señala que el Producto Interno Bruto (PIB) es una medida del tamaño de una economía pero no dice casi nada sobre su nivel de desarrollo económico. De manera análoga la cifra de patentes totales da una primera idea de la cantidad de recursos dedicada por cada país a la inversión en tecnología, permite advertir cuáles son las grandes potencias en materia tecnológica, sin embargo, no indica el nivel de desarrollo tecnológico. En términos generales se puede decir que han habido tres grandes etapas en el crecimiento de la actividad inventiva o patentadora, La primera todo el siglo XIX y el primer tercio del siglo XX hasta la crisis del 29, la segunda desde el final de la Segunda Guerra Mundial hasta la crisis de los 70, la tercera de gran expansión comenzó a mediados de los 80 y todavía persiste. Al final de los dos primeros grandes periodos hubo sendas fuertes crisis, que coinciden con las dos grandes depresiones económicas del siglo XX y en estas las solicitudes de patentes son indicativas de la profunda conexión entre la tecnología y las variables económicas. Las cifras de patentes se ven afectadas por las fluctuaciones económicas internacionales de manera muy parecida a como lo hacen las cifras de inversión en capital, lo cual hace pensar que esta es la variable económica con la que más relacionada está la actividad patentadora (Ortiz, 1999).

#### Indicadores Relacionados Con La Generación De Patentes

Como se comentó en la introducción, el foro económico mundial colocó a México en el lugar 58 de la competitividad mundial. Al observar más a detalle los doce pilares en los que se basa este estudio, nos percatamos que en los rubros de educación superior y capacitación al igual que la innovación; nuestro país está colocado en los lugares 72 y 63, con calificaciones de 4.07 y 3.19 respectivamente, de un máximo de 6.0. Esto nos motivo a investigar dos cosas: (1) Cuántas instituciones de educación superior y de investigación generan patentes, y (2) Porqué no existe un mecanismo asociado a estas instituciones que generen resultados tangibles en cantidad y calidad que generen patentes y en su caso innovaciones.

De acuerdo con los datos presentados por el Consejo Nacional de Ciencia y Tecnología (CONACYT) en 2011; el Distrito Federal tiene 6,606 investigadores registrados en el Sistema Nacional de Investigadores

(SNI), seguidos del Estado de México (1,012), Jalisco (917), Morelos (862), Oaxaca (662), Querétaro (625), Nuevo León (591), Guanajuato (557), Baja California (524) y Michoacán (515); Puebla (197) está en el lugar 21. La Secretaría de Educación Pública (SEP), en su reporte de cifras del ciclo escolar 2010-20011, presenta los siguientes datos para el número de instituciones que ofrecieron estudios de posgrado: Distrito Federal (152), Estado de México (88), Nuevo León (54), Jalisco (60) y Puebla (75). El mismo reporte, da los siguiente datos para estudiantes de nivel doctorado: Distrito Federal (8,819), Estado de México (1,660), Nuevo León (1,069), Jalisco (963) y Puebla (1,290).

Según datos de la Secretaría de Economía, en nuestro país las entidades federativas motivo de este estudio recibieron de Inversión Extranjera Directa (IED) en millones de dólares durante el 2009, los siguientes montos: Distrito Federal (8,080), Estado de México (1,484), Nuevo León (898), Jalisco (570) y Puebla (60). Paralelamente, las que más solicitudes de patentes registraron, también en orden de mayor a menor fueron el Distrito Federal (321), Nuevo León (110), Estado de México (80), Jalisco (70), Puebla (43).

Señala el Instituto Mexicano de la Propiedad Industrial (IMPI) en su reporte 2010, que en materia de patentes se recibieron 14,576 solicitudes, las cuales mostraron un incremento del 2.06% con respecto al 2009. En el 2010, los residentes extranjeros presentaron un total de 13,625 (93.48%) solicitudes de patentes, mientras que los residentes nacionales ingresaron 951 solicitudes (6.52%), lo cual es muestra de la tendencia tradicional de los últimos años en este sentido, sin embargo de las solicitudes realizadas por nacionales sólo 118 fueron otorgadas El IMPI (2011) también reporta un total de 178 solicitudes presentadas por universidades, dentro de las cuelas, las que más presentaron fueron: El Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) con 47, la Universidad Nacional Autónoma de México (UNAM) con 31, el Instituto Politécnico Nacional (IPN) con 13, la Universidad Autónoma de Nuevo León (UANL) con 13, la Benemérita Universidad Autónoma de Puebla (BUAP) con 11 y la Universidad Autónoma Metropolitana (UAM) con 8.

## METODOLOGÍA

Elegimos este tema como resultado del Reporte Anual de Competitividad publicado en 2010, donde México retrocede del lugar 60 al 66 y resulta evidente que muy poco o nada se está haciendo en materia de competitividad, luego entonces nos enfocamos al estudio del origen de la generación de patentes en México, dado que la propiedad intelectual juega un papel determinante en el crecimiento económico de los países y adicionalmente las patentes ofrecen una fuente de información con detalles únicos acerca de la actividad inventora. En este contexto, la investigación apunta hacia un análisis de las diferentes fuentes de información que permitan encontrar las relaciones entre ciertos factores de generación de patentes. Específicamente nos interesa saber:

- ¿En qué medida los integrantes del SNI, excluyendo a los clasificados en las áreas de ciencias sociales y humanidades, contribuyen en la generación de patentes? y si la carencia de ésta se debe a los criterios de evaluación existentes.
- Analizar si la generación de patentes está en función del monto de IED que reciben los Estados de la República.
- ¿Qué tanto generan en términos de patentes, las instituciones con posgrado y centros de investigación?

Para realizar esta investigación nos dimos a la tarea de recopilar información de diferentes fuentes como son: libros, revistas científicas, manuales, informes de organismos nacionales e internacionales, leyes aplicables, internet y otros medios de información. Una vez recopilada la información necesaria sobre el tema de patentes en México, procedimos a explorar y seleccionar dicha información, de tal forma que nos pudiera ofrecer directrices para la interpretación de indicadores en materia de patentes.

Por lo anterior seleccionamos para este estudio una muestra conformado por cinco entidades federativas, las cuales tienen más solicitud de patentes en México (Distrito Federal, Nuevo León, Edo. de México, Jalisco y Puebla), pues representan el 65.2% del total, información que obtuvimos del IMPI, a través de su informe anual 2009. Una vez seleccionada la muestra, se buscaron los informes anuales los cuales están estructurados con información general, actividades de registro y protección de la propiedad intelectual, actividades internacionales, administrativas y anexos. Con estos se determinaron la variable dependiente e independiente. Esto se realizó mediante la lectura y análisis de los reportes anuales correspondientes a 2009. Por tanto las variables aplicables a nuestra investigación son: variable dependiente; las patentes y las variables independientes son la IED, información obtenida de la Secretaria de Economía; instituciones con posgrado y los centros de investigación, registros obtenidos de la SEP; estudiantes de doctorado, también obtenidos de la SEP; integrantes del SNI, obtenidos del CONACYT, así como solicitudes de patentes ingresadas por universidades, obtenidos del IMPI.

Las variables independientes tuvieron una importancia relevante para el desarrollo de este estudio por lo que la descripción es elemental para este análisis, el cual se detalla a continuación. Mediante la verificación de los informes publicados por el IMPI, obtuvimos la cantidad de patentes solicitadas y otorgadas por estados, instituciones y centros de investigación. A través de la información obtenida de la Secretaría de Economía se identificaron la IED recibida por los Estados objeto de este estudio. En datos publicados por la SEP obtuvimos la cantidad de instituciones en los estados antes mencionados que ofrecen estudios de posgrado, al igual que el número de estudiantes de doctorado inscritos en dichas instituciones. Esto por la inclinación investigadora de los programas doctorales. Respecto a información sobre el padrón vigente del SNI y la cantidad de patentes registradas por sus integrantes, fue obtenida del CONACYT. Una vez habiendo obtenido todas las variables para el trabajo, se procedió a hacer un análisis estadístico de regresión lineal por medio del programa de computadora MINITAB 15, del cual se obtuvieron los *valores p* y R-Cuadrado, los cuales muestran si existe relación entre las variables. A continuación, en la sección de resultados, se muestran los valores de cada variable independiente, arrojados por el programa; con la ayuda de los cuales llegamos a las conclusiones, también mostradas en la sección correspondiente.

## RESULTADOS

A continuación se presentan los resultados obtenidos por medio del MINITAB 16, presentando tantos las ecuaciones que describen la relación entre la variable dependiente y cada una de las variables independientes por separado, así como los valores p y el coeficiente de determinación o R-Cuadrado ajustado, que representa el porcentaje de variación de la variable dependiente con la variable independiente. Para esta prueba, se propone un nivel de significancia  $\Box$ =0.05.

Patentes solicitadas vs. Investigadores en el SNI. Ecuación de regresión: Patentes = 47.9 + 0.0412 SNIS. Valor p: constante = 0.045; investigadores = 0.003. R-Cuadrado ajustado = 94.9% De acuerdo a estos datos, los valores p son menores al nivel de significancia  $\Box$  y el R-Cuadrado ajustado es mayor al 90%, por lo tanto, se acepta esta relación como válida. Patentes solicitadas vs. IED (en millones de pesos) Ecuación de regresión: Patentes = 50.7 + 0.0334 IED. Valor p: constante = 0.024; IED = 0.002. R-Cuadrado ajustado = 96.4% Los valores p son menores al nivel de significancia  $\Box$  y el R-Cuadrado ajustado ajustado es mayor al 90%, por lo tanto, se acepta esta relación como válida.

*Patentes solicitadas vs. Instituciones con posgrado:* Ecuación de regresión: Patentes = -92.6 + 2.53 Inst. Valor p: constante = 0.281; Inst. = 0.045. R-Cuadrado ajustado = 71.6% Solo el valor de p de las instituciones es mayor al nivel de significancia  $\Box$ y el R-Cuadrado ajustado es menor al 90%, por lo tanto, esta relación se rechaza.

*Patentes solicitadas vs. Estudiantes de doctorado:* Ecuación de regresión: Patentes = 36.8 + 0.032Estudiantes. Valor p: constante = 0.148; Estudiantes = 0.006. R-Cuadrado ajustado = 92.1% Solo el valor de p de los estudiantes es mayor al nivel de significancia  $\Box$  y el R-Cuadrado ajustado es mayor al 90%, por lo tanto, *se acepta esta relación como válida*. Observando los resultados anteriores, se concluye que tres de las cuatro variables independientes tienen relación directa con la solicitud de patentes. Esto se puede determinar, porque en dichas variables (número de investigadores, IED y estudiantes de doctorado) el valor de R-Cuadrado ajustado es mayor al 90%, lo que indica una relación elevada entre las variables. Además el valor p es menor al nivel de significancia propuesto. Patentes solicitadas vs. Investigadores en el SNI, IED y Estudiantes de doctorado Ecuación de regresión: Patentes = 57.7 + 0.057 SNIS – 0.049Estudiantes de doctorado + 0.0446 IDE. R-Cuadrado ajustado = 90.5% El R-Cuadrado ajustado es mayor al 90%, por lo tanto, *se acepta esta relación como válida*.

## CONCLUSIONES

El 85% de las patentes otorgadas por el IMPI han sido para titulares extranjeros; es decir, la protección legal no es suficiente para desarrollar conocimientos productivos. Existe, claramente, un problema de recursos, la poca inversión en conocimiento en el país (incluida educación, salud, servicios, etc.) limita la capacidad de generación de conocimiento productivo y limita la capacidad de absorción y adaptación de la tecnología. Diversos trabajos en las áreas de la innovación tecnológica demuestran que la adopción de tecnología tiene importantes costos, por lo que los países deben desarrollar su capacidad de absorber tecnología (no se obtiene por generación espontánea), lo que implica, necesariamente, invertir en I&D (Cohen y Levinthal, 1989; Griffith, Redding y Van Reenen, 2003).

En México en la última década el 95% de las solicitudes de patentes son generadas por extranjeros, por lo que hay una correlación positiva entre el crecimiento del PIB y la solicitud de patentes extrajeras, lo cual sugiere que la actividad económica mexicana está apoyada en la creciente inversión extranjera directa y por lo tanto las solicitudes hechas por mexicanos están negativamente correlacionadas con el crecimiento del PIB (Hernández y Díaz, 2007). Los parámetros de evaluación de los integrantes del SNI otorgan el mismo valor a un artículo de investigación que a la generación de patentes, razón por la cual los investigadores optan por enfocar los recursos y esfuerzos a la publicación de artículos científicos en lugar de generar patentes, sin dejar de lado que existe un 31.41% que corresponden a áreas de Humanidades y Ciencias Sociales, por tanto su trabajo de investigación, por la naturaleza propia de su área de estudios, no estará direccionado hacia la generación de patentes. Por las razones anteriores, consideramos necesario hacer un cambio en los parámetros de evaluación de los investigadores en el SNI, para impulsar sus esfuerzos hacia la producción de conocimiento encaminado a producir patentes.

En nuestra opinión lo que nuestro país necesita es empezar a ver el trabajo científico desde otra perspectiva. Dando menos peso a la generación de tecnología básica, impulsado la Ciencia y Tecnología generadora de productos comerciales que aporten recursos a México, que como primer paso sirvan para autofinanciar las investigaciones y a largo plazo logren ser una importante fuente de ingresos desde el exterior. Esto puede darse desde los trabajos de investigación realizados por los estudiantes de doctorado en diversas áreas, pudiendo manejarse como una política académica, el que cada estudiante de las áreas de ciencias e ingeniería, debe patentar para poder obtener el doctorado.

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# IMPLEMENTACION DE UN PROCESO DE DESARROLLO ORGANIZACIONAL EN UNA MICROEMPRESA

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## RESUMEN

Las organizaciones y seres humanos son tan susceptibles a los tiempos cambiantes, su ascenso y caída, su éxito y fracaso, atestiguan toda su vulnerabilidad. El Desarrollo Organizacional, es una respuesta al cambio, una compleja estrategia educativa cuya finalidad es cambiar las creencias, actitudes, valores y estructura de las personas en las organizaciones, en tal forma que éstas puedan adaptarse mejor a nuevas tecnologías, mercados y retos, así como al ritmo vertiginoso del cambio mismo. Esta investigación representa un interés de aportar una contribución en los conceptos, ideas y aplicación de teorías del campo de Desarrollo Organizacional que son básicos para el estudio de los mismos y con la cual se pretende que sea una herramienta de consulta para que se tenga una visión general de cómo aplicar en una microempresa la valiosa herramienta del Desarrollo Organizacional.

**PALABRAS CLAVES:** Microempresa, Desarrollo Organizacional, Cambio Planeado, Cambio, Administración de la microempresa.

## IMPLEMENTATION OF A PROCESS OF ORGANIZATIONAL DEVELOPMENTIN A MICROBUSINESS

## ABSTRACT

Organizations and human beings are very susceptible to changing times, its rise and fall, success and failure, all attest their vulnerability. The Organizational Development, is a response to change, a complex educational strategy aimed at changing beliefs, attitudes, values and structure of people in organizations, then they can better adapt to new technologies, markets and challenges, and the rapid pace of change itself. This research represents an interest to bring a contribution in of those concepts, ideas and implementation of field theories of organizational development that are essential to study them and take as a reference tool to be taken an overview of how to apply a small business the valuable tool of Organizational Development.

## **JEL:** M10,M12,M14

**KEYWORDS:** Small Business, Organizational Development, Planned Change, Change, Management of microenterprise.

## INTRODUCCION

Este trabajo titulado "Implementación de un proceso de desarrollo organizacional en una microempresa de la localidad" tiene como objetivo general desarrollar y aplicar el proceso de desarrollo organizacional para el mejoramiento del clima organizacional y una clara dirección empresarial, y de esta forma asegurar la eficacia y eficiencia laboral. Los objetivos específicos de este análisis son:

- Efectuar un diagnóstico de la empresa, para poder definir su situación y necesidades de cambio identificando y evaluando los problemas que presenta.
- Elaborar estrategias de intervención. Para poder realizar un cambio planificado que ayude alcanzar los objetivos.

Se ha tomando como base a la aplicación de un proceso de Desarrollo Organizacional como herramienta efectiva para lograr cambios organizacionales. Se podrá determinar si:

- ¿Es posible rescatar a una microempresa ya cuando manifiesta síntomas de decadencia organizacional?
- ¿Es el Desarrollo Organizacional un proceso efectivo para lograr un cambio planeado dentro de la organización?
- ¿Es posible lograr el cambio de actitudes y valores del equipo humano para una coordinación de actividades con las cuales se llegue eficientemente al logro de los objetivos?

Actualmente, los retos que enfrentan las organizaciones contemporáneas, para lograr su permanencia y modernidad, se basan en unir conocimientos, habilidades y experiencias diversas para optimizar los esfuerzos y asegurar el éxito. Se percibe una nueva filosofía, en el manejo del cambio para las organizaciones de trabajo; necesitan para su realización exitosa, cambiar los valores, actitudes, creencias, conductas actuales, etc., en los individuos que conforman la organización y sensibilizarlos para cualquier proceso de cambio. En conclusión, se está haciendo necesario el uso del desarrollo organizacional para cambiar esas actitudes, valores, etc., y sentar las bases necesarias para lograr la excelencia, la calidad total que, en opinión de los expertos, les permita asegurar su competitividad. (Audirac Carlos, 2005)

Las microempresas en México son un motor de crecimiento económico y de empleo fundamental para el país ya que, de acuerdo a resultados del último censo económico del INEGI: De cada 100 empresas mexicanas, 96 son microempresas, contribuyen con el 40.6% del empleo y aportan el 15% del PIB. (México Emprende, 2012).A lo anterior se debe que el objeto de estudio de esta investigación es una microempresa dedicada al giro electromecánico realizando actividades tales como la construcción de líneas eléctricas de alta tensión, compra y venta de material eléctrico, construcción de subestaciones, equipamientos de pozos, alumbrado público e Instalación de Transformadores, ubicada en la ciudad de Hermosillo Sonora México, en la cual se llevarán a la práctica los términos y actividades del Desarrollo Organizacional esperando ver resultados positivos en un término a corto plazo debido a la urgencia de enfrentar los cambios drásticos a la forma actual de trabajo.

## METODOLOGÍA Y NIVELES DE LA INVESTIGACIÓN

Se realizó en primera instancia una revisión teórica para poner al descubierto investigaciones previas con vínculos entre el Desarrollo Organizacional y la Administración de la Microempresa. Posteriormente el estudio se desarrolló en forma inductiva; utilizando metodologías de carácter cualitativo con el uso de herramientas cuantitativas. La metodología cualitativa se desarrolló por medio de entrevistas estructuradas dirigidas a informantes clave. Esta metodología brindó la posibilidad de medir la percepción y sensibilización de las personas hacia el tema bajo estudio. El uso de herramientas cuantitativas, se desarrollarán por medio de encuestas levantadas al personal que trabaja en la microempresa objeto de estudio.La investigación consta de tres niveles o apartados. El apartado uno, es teórico-analítico y tiene como objetivo discutir y describir diferentes conceptos que impactan al tema de investigación, tales como, la Importancia económica y social de las micros, pequeñas y medianas empresas en México, la

clasificación por tamaño y por giro de las micros, pequeñas y medianas empresas, el concepto de la Consultoría, los antecedentes y concepto de Desarrollo Organizacional, el Desarrollo Organizacional como ciencia de la conducta los beneficios y limitaciones de aplicar desarrollo organizacional en las organizaciones, el proceso de cambio en las organizaciones, el proceso de cambio planeado de Fernando Achilles de Faria Mello e Intervenciones estratégicas. El Apartado dos, es práctica-analítica ya que se realizó la aplicación de un modelo de cambio planeado basado en la propuesta de Fernando Achilles de Faria Mello. El apartado tres, constituye una sección interpretativa que tiene como finalidad exponer los resultados obtenidos en la segunda parte y plantear propuestas de acción resultantes de la investigación.

#### Modelo Administrativo Aplicado En La Investigación

#### Proceso De Cambio Planeado De Fernando Achilles De Faria Mello

El Desarrollo Organizacional es un proceso de cambio planeado en sistemas socio – técnicos abiertos, tendientes a aumentar la eficacia y la salud de la organización para asegurar el crecimiento mutuo de la empresa y sus empleados (Mello, 2002). El cambio planeado dentro de la concepción del desarrollo organizacional, puede subdividirse en etapas o fases de consultoría. Ver Figura 1

#### Aplicación Del Modelode Cambio Planeado De Fernando Achilles De Faria Mello

A continuación se detalla la aplicación del modelo de cambio planeado de Fernando Achilles de Faria Mello, a la microempresa objeto de estudio.

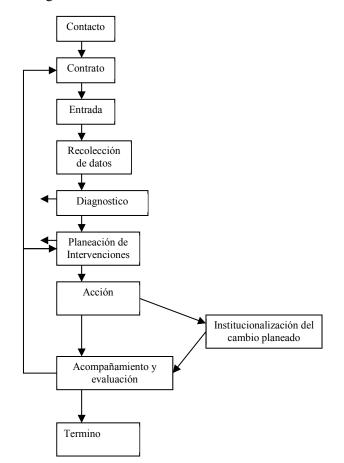
*Contacto:* En una reunión, con el gerente general y/o propietario se informó sobre los antecedentes de la problemática, explicó las situaciones fuera de control que se presentaron con el personal, tales situaciones como robos de material, desanimo laboral, obras inconclusas y mal terminadas, pérdida en el equipo de trabajo, pérdida de equipo mecánico por descuido de los empleados, exceso de rotación de personal, falta de liquidez para realizar obras, pocas o nulas posibilidades para financiar obras, altos costos operativos y administrativos sin ningún resultado favorable para la empresa.Las indudables expectativas del propietario son tener permanencia en el mercado, hacer crecer a la empresa, mejorar la calidad de vida de sus trabajadores y lograr que estos mismos sientan a la empresa como propia de ellos.

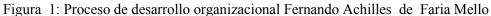
## <u>Contrato</u>

Elaboración de un contrato de servicio con la microempresa objeto de estudio.

## Recopilación De Datos Y Diagnostico.

En las observaciones que se realizaron dentro de la empresa se puede decir que si bien es cierto que el cambio se debe de efectuar de una forma paulatina para no causar incertidumbre y temor dentro de la empresa y que toda situación insatisfactoria es causal suficiente para trabajar de una forma distinta, es también cierto que el "cambio" no es nada sencillo sobre todo cuando se ha trabajado con bases no sólidas en la formación de una cultura laboral.Se realizaron entrevistas a los empleados de la empresa para realizar un diagnostico situacional. El formato para las entrevistas, tomado del diplomado de planeación estratégica impartido por Ing. Ricardo Valenzuela González, son 44 preguntas de opción múltiple con las opciones si, no ó parcialmente. Las respuestas a las interrogantes arrojaron los siguientes resultados: La empresa no tiene una misión clara. Tanto los puestos administrativos como operativos desconocen plenamente la dirección de la organización. No existe una estructura formal de la organización.





En esta figura se puede apreciar las secuencia que sigue el Modelo de Cambio Planeado utilizado en esta investigación

No hay formalización de puestos ni de funciones, lo cual lleva a cometer errores como duplicidad de funciones, desconocimiento de las responsabilidades, obligaciones y derechos que cada uno de los colaboradores tienen dentro de la organización. La comunicación es desmesuradamente informal lo cual facilita el incorrecto desarrollo de las actividades.

No hay sistema documentado con el cual se puedan controlar las actividades que se han realizado.

No se realizan inventarios de materiales ni de equipos de oficina.

No se realizan controles en formatos establecidos al momento de entrar y salir insumos al almacén.

No hay mantenimiento preventivo adecuado para el equipo y las instalaciones de las áreas de trabajo. Existe un exceso de rotación de personal.

Se presenta el ausentismo laboral. Hay incumplimiento con horarios de trabajo. No existe una formulación de objetivos ni a corto mediano o largo plazo. Los empleados desconocen los objetivos de su área lo que implícitamente trae cierto sentimiento de incertidumbre entre ellos. No hay un conocimiento y aprovechamiento de las fortalezas y oportunidades de la organización, ni un enfrentamiento y

disminución de las amenazas y debilidades de la misma. Existe demasiada "delegación de autoridad" entre los integrantes de la organización lo que se traduce a una "anarquía organizacional"

La empresa se enfrenta a una crisis financiera y la causa principal de esa crisis es el alto gasto operacional al que incurre la organización. Mala administración en la aplicación de presupuestos asignados para cada proyecto.

#### Planeación De Las Intervenciones

De acuerdo a los resultados del diagnóstico organizacional, y entrevistas se han propuesto una serie de intervenciones que paulatina pero constantemente se han implementado en la empresa. El reforzamiento positivo de las intervenciones siguientes tendrá como finalidad el aumento en la productividad de la empresa. Como punto de partida se diseñaron unos "gafete" personalizados a cada uno de los empleados lo cual ha servido para identificar al empleado y para que a su vez se pueda identificar como personal de la empresa cuando así le sea requerido Se elaboraron formatos que contendrán datos personales que responderán los empleados, esto será para que la empresa pueda tener un expediente con los datos personales y profesionales de sus empleados Posteriormente se propone la creación de la misión y visón de Herrajes y equipos de alta tensión, las cuales se colocarán decorativamente en lugares estratégicos dentro de la empresa para que en cualquier momento puedan darle lectura cualquiera de los empleados, clientes y/o visitantes de la empresa. Se han creado manuales de organización, con la descripción de cada uno de los puestos, los cuales se entregaron por duplicado, de cada uno de los puestos. Uno de ellos estarán en la pequeña biblioteca del gerente y el otro se le hará llegar a cada uno de los empleados para formalizar por escrito y estén consciente de cada una de las actividades que desarrollaran y así evitar confusiones en cuanto a las obligaciones y responsabilidades.

Para evitar que la comunicación sea desmesuradamente informal al momento de programar el trabajo se crearon ordenes de trabajo y diagramas de flujo de obra donde se estandarizan las actividades y el tiempo en que se proyecta en que sea concluido el trabajo, esto ayuda a reducir otro problema referente a que no hay un control de las actividades que se están realizando. Al equipo móvil de trabajo se le efectuarán revisiones periódicas antes de cada salida de la ciudad y al momento de llegar de nuevo a la base de los puntos principales para así poder detectar y evitar al máximo fallas mecánicas importantes. El problema de rotación de personal se ha tratado de reducir teniendo por parte de la organización una concientización al momento de contratar personal y contratando personas que se acerquen más al perfil del puesto.

Para el ausentismo laboral existe un formato en donde se le hace unas preguntas al trabajador sobre sus razones de haber faltado a laborar. Para cumplir de una forma más correcta y ejercer un poco de presión para el cumplimiento del horario de trabajo a los trabajadores se instalará un reloj checador y se asignará quincenalmente tarjetas para registrar electrónicamente el horario a cada uno de ellos. Se ha efectuado un análisis FODA (fortalezas, oportunidades debilidades y amenazas), es una herramienta que permite conformar un cuadro de la situación actual de la empresa u organización, permitiendo de esta manera obtener un diagnóstico preciso que permita en función de ello tomar decisiones acordes con los objetivos y políticas formulados. Para el problema financiero se le sugiere a la gerencia que estudie la posibilidad de solicitar un préstamo financiero en alguna institución bancaria o algún programa gubernamental de apoyo a las PYMES para que así se pueda culminar con los proyectos que están pendientes e iniciar una nueva etapa laboral, en donde encaje una mejor administración del recurso financiero. Dentro de los apoyos económicos que la Secretaría de Economía proporciona a las MIPYMES destaca el Programa Nacional de Financiamiento a Microempresarios (PRONAFIM) con el objetivo de incentivar el autoempleo y de esta manera lograr que los microempresarios ingresen a las cadenas productivas del país. Dentro de estas intervenciones que se ofrecen es muy importante recalcar la gran disposición que tienen los integrantes de la microempresa objeto de estudio, en hacer mejor las cosas y la apertura mental ante la forma nueva de laborar.

## CONCLUSIONES Y RECOMENDACIONES

## CONCLUSIONES

Desarrollo organizacional es el estudio de la organización, sus procesos y sus relaciones con la gente que pertenece a la organización, estudia las áreas de conflicto potencial entre las personalidades de los empleos y las demandas de la organización sobre ellos. Es decir, si se conocen las causas que afectan tanto a los empleados como a los procesos de la organización entonces se puede trabajar sobre estas, eliminarlas y así poder llegar al cumplimiento de lo objetivos. Por lo tanto, de acuerdo al análisis realizado se considera que los objetivos propuestos en este estudio han sido cubiertos, ya que se ha efectuado un diagnóstico de la empresa pudiéndose definir su situación y las necesidades de cambio, se identificaron y evaluaron los problemas que se habían estado presentando. Con esto se dió pauta a elaborar estrategias de intervención, para poder realizar un cambio planificado que ayudó a alcanzar los objetivos organizacionales. Por lo tanto y conforme al objetivo general, "la aplicación de un proceso de desarrollo organizacional para el mejoramiento del clima y una clara dirección empresarial, asegurando así la eficacia y la eficiencia laboral." Se puede concluir que este fue alcanzado. Así mismo con lo anteriormente expresado se concluye: "*Que la aplicación de un proceso de Desarrollo Organizacional mejorará la eficacia y la eficiencia de una microempresa"*.

#### Recomendaciones

Se recomienda al propietario de la microempresa en estudio que labore basándose en las sugerencias y estrategias de intervención propuestas en el proceso de cambio planeado. Paralelo a lo anterior se recomienda: Que se cree un clima de receptividad para reconocer las realidades organizacionales, y de abertura para diagnosticar y solucionar problemas. Diagnosticar problemas y situaciones insatisfactorias. Establecer un clima de confianza, con el fin de que no haya manipulación entre el jefe y colaboradores. Que se desarrollen las potencialidades de los individuos, en las áreas de las tres competencias: técnica, administrativa e interpersonal. Que se desarrolle la capacidad de colaboración entre individuos y grupos, que conduce a la sinergia de esfuerzos y al trabajo - en equipo. Compatibilizar, viabilizar, armonizar e integrar las necesidades y objetivos de la empresa y de quienes forman la empresa. Estimular las emociones y sentimientos de las personas.

Siempre que el riesgo lo permita, poner los conflictos, fricciones y tensiones "sobre la mesa" y tratarlos de modo directo, racional y constructivo. Despertar o estimular la necesidad de establecer objetivos, metas y fines que, siempre que sea posible, estén cuantificados y bien calificados que orienten la programación de actividades y evaluación de los desempeños de sectores, grupos e individuos. Localizar las responsabilidades de solución y la toma de decisiones, lo mas próximo posible de las fuentes de información en el nivel adecuado al tipo de solución. Desarrollar la organización a través del desarrollo de los individuos. Compatibilizar y optimizar metas, recursos, estructuras, procedimientos y comportamientos. Perfeccionar el sistema y los procesos de información y comunicación Identificar puntos de bloqueo o pérdida de energías y recursos de varios tipos: fisicos, humanos, materiales, de información, etc.

El recurso humano de la empresa es un elemento más valioso para el éxito de la misma!!!

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# EL TURISMO EN SUSTICACAN, ZACATECAS

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## RESUMEN

Actualmente la práctica del turismo en lugares pequeños ha ido ganado terreno frente a las preferencias de sol y playa, buscando lugares pequeños y tranquilos de contacto con la naturaleza, por ello es necesario crear productos innovadores y creativos capaces de satisfacer los gustos y preferencias de los turistas. Tal es el caso del municipio de Susticacán ubicado en la parte suroeste de la capital del estado de Zacatecas, que nos ofrece estar alejado del bullicio y cercanos a la tranquilidad que pose, incitando a disfrutar de la naturaleza, la cultura y la tradición de su pueblo. Es necesario trabajar en conjunto para poder pulir las riquezas de este pueblo y constituirlo como un lugar altamente turístico y obtener beneficios tanto los residentes como los turistas en materia económica y social. Es por esa razón que se ha decidido realizar esta investigación que apoye para definir ideas, que ayuden a generar ingresos que contribuyan al desarrollo económico de la región en el sector turístico.

PALABRAS CLAVES: lugares pequeños, creatividad, tranquilidad, cultura, tradición y pulir riquezas.

# TOURISM IN SUSTICACÁN, ZACATECAS

# ABSTRACT

Currently the practice of tourism in small places has been gaining ground against the preferences of sun and sand, looking for small and tranquil places of contact with the nature, so it is necessary to create innovative and creative products that will satisfy the tastes and preferences of the tourists. That is the case of the municipality of Susticacán located in the southwestern part of the state capital of Zacatecas, which offers us to be away from the bustle and close to the tranquility that pose prompting to enjoy the nature the culture and the tradition of the town. Is necessary to work together to polish the riches of this town and incorporate it as a highly touristic and obtain benefits for both for residents and for the tourists in the economic and social. Is for that reason that has decided to make this investigation that supports for defining ideas that help generate revenue to contribute to the economic development of the region in the tourism sector.

**JEL:** R11, R13

**KEYWORDS:** Small spaces, creativity, tranquility, culture, tradition and polish riches.

# INTRODUCCIÓN

A través de un estudio sobre el municipio de Susticacán, se pretende realizar un diagnostico en el que se recolecte información referente a los atractivos, tanto naturales como culturales con los que cuenta el municipio, y en base a ello realizar un plan estratégico en el que se establezcan estrategias para la organización, de producto, promoción y plaza los cuales son aspecto importantes para la venta del producto. De igual manera establecer el plan operativo para definir la manera en que se ejecutaran cada una de las actividades.

# **REVISIÓN LITERARIA**

Este municipio cuenta con una gama amplia de atractivos turísticos, culturales, tradicionales, gastronómicos y artesanales que no son promovidos, por no tener la visión ni los conocimientos de los benefícios económicos que ofrece el turismo.

Estos hechos se relacionan con investigaciones realizadas sobre destinos turísticos para sensibilizar a la población local, respecto al rechazo que ésta tiene sobre el turismo. Como se menciona en el artículo publicado en el diario El País, titulado "Turistofobia", el antropólogo Manuel Delgado apuntaba que turistas e inmigrantes "son vistos como nuevos en la ciudad (...) ese mismo factor es el que hace a ambos protagonistas potenciales de un mismo imaginario que advierte en el forastero la figura del bárbaro invasor al que hay que mantener aislado y vigilado". En todo caso, añadía este antropólogo, "no es el turismo el que ha vaciado los centros históricos, sino la gestión de la ciudad como negocio".

La población de Susticacán tiene contacto con los turistas de manera indirecta, dado a que no se cuenta con los servicios complementarios, como hospedaje, alimentación, y se tiene dificultad de transporte público, los cuales causan distintos efectos tanto en el turista como en los habitante del lugar. Un artículo publicado por Agustín Santana Talavera, señala que: "Los impactos socioculturales son -impactos sobre la gente-, esto es, los efectos que sobre los residentes habituales y fijos de la comunidad anfitriona tienen las asociaciones directas e indirectas con los visitantes, a lo que habría que añadir los efectos de la actividad turística y los encuentros sobre los mismos individuos que practican el turismo y sus sociedades de origen."

Los efectos mencionados por los autores señalados anteriormente se relacionan con el municipio, dado a que en Susticacán la población trata de mantener al turista aislado y vigilado, en lugar de acercarse para brindarle la información necesaria para su estancia en el lugar. De igual manera es cierto que en el turismo se tiene impactos sobre los residentes habituales y son dados a causa de las prácticas turísticas que se dan por las distintas sociedades que participan, mas sin embargo es importante educar al turista en cuanto al respeto de sus costumbres, de sus tradiciones y de su entorno, para que exista una mejor interacción tanto por parte del turista como de los anfitriones del lugar.

# METODOLOGÍA

En este proyecto de investigación se pretende realizar un estudio de campo para definir el estado y la cuestión turística del municipio, al mismo tiempo se pretenderá llevar a cabo la investigación documental en recursos bibliográficos, aplicando las herramientas de metodológicas como son: la observación, las entrevistas, tanto a las autoridades como a los habitantes. Las cuales nos darán la oportunidad de conocer más de cercas las composiciones del sector turístico en Susticacán.

En base a lo anterior se pretenderá implementar estrategias que sirvan de apoyo para la realización de actividades que sirvan de impulso para el desarrollo del turismo en el municipio.

# RESULTADOS

La población de Susticacán muestra que a pesar del fuerte potencial turístico este no es conocido incluso por la mayoría de los habitantes de la región, es decir, es un lugar escondido y aislado que guarda en su interior toda la magia dormida de un lugar que está esperando despertar y ofrecer al visitante la infinidad de riqueza turística que posee.

Sin embargo algunos habitantes han tenido la iniciativa de cooperar en las distintas actividades que se han realizado en el municipio, referentes al turismo, tales como; degustaciones gastronómicas, exposiciones

artesanales que los mismos habitantes están creando con materiales de la región, recorridos turísticos y otras prestaciones de servicios. Se espera que cada vez mas la gente esta demostrando el interés que se tiene para que exista mayor demanda turística en el municipio, con el fin de que les traiga crecimiento con el paso del tiempo.

### CONCLUSIONES

De un análisis introductorio realizado a las autoridades y a la población en general, se concluyó que tanto autoridades locales como población del municipio no hacen nada para promover los atractivos turísticos con los que cuenta el municipio, por la razón del temor a ver trastocados sus valores locales, lo que origina que muy poca gente acuda a esta población, y que no exista una derrama económica que sería de gran beneficio a la población.

De igual manera se concluyó que tanto las autoridades y la comunidad aun teniendo los atractivos necesarios para atraer turismo de las regiones vecinas, no lo hacen y es a causa de la ignorancia o porque tienen valores culturales que se pueden ver perturbados por culturas distintas a la de ellos.Por razones anteriores, es de suma importancia hacerles ver a la población y a las autoridades mediante nuestra investigación, las bondades que ofrece el turismo y el gran desarrollo para el municipio y los beneficios que trae consigo para la comunidad en general. Claro está, sin quebrantar de sus costumbres y tradiciones

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# RELACIÓN DE CAUSALIDAD ENTRE EL ÍNDICE DE PRECIOS DEL PRODUCTOR Y EL ÍNDICE DE PRECIOS DEL CONSUMIDOR INCORPORANDO CAMBIOS ESTRUCTURALES: EL CASO DE LOS PAÍSES MIEMBROS DEL TLCAN

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## RESUMEN

En este artículo se analiza la relación de causalidad entre los precios al productor y al consumidor para el caso de los países miembros del Tratado de Libre Comercio de América del Norte (TLCAN) durante el período 1957:01-2011:04. Para ello, se utilizan la prueba de raíz unitaria de Lee y Strazicich (2003) que permite cambios estructurales y la prueba de causalidad de Toda y Yamamoto (1994). Los resultados indican que la causalidad va de los precios del productor a los precios del consumidor y de estos últimos a los primeros para el caso de Estados Unidos, de los precios del productor a los del consumidor para México y de los precios del consumidor a los del productor para Canadá.

PALABRAS CLAVE: Precio; causalidad; raíz unitaria; TLCAN.

# CAUSALITY RELATIONSHIP BETWEEN THE PRODUCER PRICE INDEX AND CONSUMER PRICE INDEX INCORPORATING STRUCTURAL CHANGES: THE CASE OF NAFTA COUNTRIES

### ABSTRACT

This paper analyzes the causality relationship between producer prices and consumer prices in the case of the members of the Free Trade Agreement (NAFTA) countries for the period 1957:01-2011:04. In so doing, we apply the unit root test proposed by Lee and Strazicich (2003) that allows testing for structural changes and causality test of Toda and Yamamoto (1994). The results in this research suggest that causality runs from producer prices to consumer prices, and vice versa in the case of the USA, from producer prices to consumer prices in the case of Mexico, and from consumer prices to producer prices in the case of Canada.

KEYWORDS: Price; causality; unit root; NAFTA.

**JEL:** E31, E50, C32

# INTRODUCCIÓN

Conocer la relación de causalidad entre el índice de precios del productor y del consumidor es de gran utilidad para los bancos centrales, ya que uno de los objetivos importantes es la estabilidad del poder adquisitivo de la moneda nacional, debido a que una inflación baja y predecible puede contribuir al ahorro, la inversión, al crecimiento de la actividad económica y a la creación de empleos. Actualmente, los bancos centrales cuentan con autonomía suficiente y su objetivo principal es la estabilidad de precios utilizando la política monetaria (Roa y Bukhari, 2011). En la literatura sobre la relación de causalidad entre los precios del consumidor y productor existen dos mecanismos que explican la dirección de causalidad entre ellos, por el lado de la demanda y por el lado de la oferta, respectivamente. Por el lado de la oferta, las materias primas sirven como *inputs* para la producción de bienes intermedios, que a su vez, sirven como *inputs* para la producción de bienes finales (Akcay, 2011). De esta manera, el traspaso se da de los precios de las materias primas a los precios de los bienes intermedios y a los bienes finales, y finalmente, a los precios del consumidor (Rogers, 1998).

Por el lado de la demanda, la demanda de *inputs* entre usos en competencia es determinada por la demanda final de bienes y servicios (Akcay, 2011). De tal manera, que el costo de producción se ve reflejado en el costo de oportunidad de los recursos y bienes intermedios, que a su vez, es producto de la demanda de bienes y servicios finales (Caporale et al., 2002). De esta manera, la relación de causalidad puede ir en un sentido u otro o en ambos. En términos econométricos, la estabilidad de los parámetros de un modelo de regresión es una de las hipótesis básicas en econometría, la cual es necesaria para la predicción y la inferencia econométrica. Cambio estructural o inestabilidad estructural ha sido interpretada comúnmente como cambios en los parámetros de un modelo de regresión (Maddala y Kim, 1998). La estabilidad de los parámetros es una de las hipótesis básicas en econometría, la cual es necesaria para la predicción y la inferencia econométrica. El objetivo de la presente investigación es analizar la relación de causalidad entre el índice de precios del productor y el índice de precios del consumidor para el caso de México, Estados Unidos y Canadá. Después de esta introducción el estudio consta de cuatro secciones. En la primera sección, se hace una breve descripción de los hallazgos empíricos sobre esta relación de causalidad, según los autores, más relevantes y recientes. En la segunda, se describe brevemente la metodología de la prueba de raíz unitaria de Lee y Strazicich (2003) y la prueba de causalidad de Toda y Yamamoto (1995). En la sección siguiente, se analizan los resultados obtenidos. Y se finaliza el estudio con una sección de conclusiones.

# **REVISIÓN LITERARIA**

En esta sección se hace una breve descripción de los hallazgos empíricos sobre el tema. Para el caso de Estados Unidos existen varios estudios como: el de Colclough y Lange (1982) cuyos resultados indican que la causalidad va de los precios del consumidor a los del productor; el de Jones (1986) muestra evidencia de que existe una causalidad bidireccional en los precios. Caporale *et al.* (2002) analizan la relación de causalidad de los precios en los países del G7 para el periodo de enero de 1976 a abril de 1999. Ellos utilizan la prueba de causalidad de Toda y Yamamoto (1995) con un Vector Autorregresivos (VAR) de dos variables y encuentran una causalidad unidireccional, de los precios del productor a los precios al consumidor en Francia y Alemania, causalidad bidireccional para Italia, Japón, Reino Unido y Estados Unidos, y ninguna relación de causalidad es unidireccional de los precios del consumidor en francia y alemania, causalidad bidireccional de los precios del productor a los precios del consumidor en Francia y Alemania, causalidad bidireccional para Italia, Japón, Reino Unido y Estados Unidos, y ninguna relación de causalidad es unidireccional de los precios del productor a los precios del consumidor para todos indican que la causalidad es unidireccional de los precios del productor a los precios del consumidor para todos los países.

Ghazali *et al.* (2008) analizan la relación de causalidad de los precios del productor y consumidor para el caso de Malasia durante el periodo de enero de 1986 a abril de 2007. Utilizando las pruebas de causalidad de Granger (1969) y Toda y Yamamoto (1995), sus resultados muestran evidencia de una relación de equilibrio de largo plazo entre los precios y una causalidad unidireccional, de los precios del productor a los precios del consumidor. Sidaoui *et al.* (2009) analizan la relación de causalidad entre el índice nacional de precios al productor y el índice nacional de precios al consumidor para el caso de México, durante el periodo de enero 2001 a junio de 2009. Utilizando pruebas de causalidad à la Granger, los resultados indican que al parecer la información de los precios del productor es útil para mejorar los pronósticos de la inflación de los precios del consumidor. Aviral y Muhammad (2010) analiza la relación de causalidad entre los precios del productor y consumidor para el caso de causalidad entre los precios del productor y consumidor. Aviral y Muhammad (2010) analiza la relación de causalidad entre los precios del productor y consumidor para el caso de India. Estos autores encuentran evidencia de causalidad bidireccional entre los precios tanto en el corto como en el largo plazo. Por su

parte, Akcay (2011) examina la relación causal entre los índices de precios del consumidor y productor para cinco países europeos con datos mensuales ajustados estacionalmente, de agosto de 1995 a diciembre de 2007. Empleando la prueba de causalidad de Toda y Yamamoto (1995) sus resultados indican que hay causalidad del índice de precios del productor al índice de precios del consumidor para Finlandia y Francia, causalidad bidireccional en Alemania, y para el caso de Países Bajos y Suecia no existe ninguna relación causal estadísticamente significativa. Como se puede observar, la evidencia empírica muestra que la causalidad de los precios puede ir en uno u otro sentido o en ambos.

# METODOLOGÍA

Para la realización de las pruebas de causalidad es necesario que las variables sean estacionarias para evitar resultados espurios en regresiones con series de tiempo no estacionarias. Para ello, se analiza la estacionariedad de las series a estudiar con la Lee y Strazicich (2003)- LS que permite dos cambios estructurales. Para de esta manera, no incurrir en la diferenciación de las series cuando no es necesario, ni correcto (Fernández, 1997 y Islam, 2001) puesto que las series pueden ser estacionarias al tomar en cuenta la tendencia determinística y los cambios estructurales existentes.

Por otra parte, existen varias pruebas de causalidad, entre ellas, la de Granger (1969), Sim (1972), Geweke *et al.* (1982) y la prueba de causalidad propuesta por Toda y Yamamoto (1995). En las primeras tres pruebas se requiere que las variables sean estacionarias, para evitar obtener resultados espurios en regresiones con series de tiempo no estacionarias y, conocer, el orden de integración de las series para la última prueba. En esta investigación se aplica la de Toda y Yamamoto.

Toda y Yamamoto (1995) proponen una aproximación para evaluar la relación de causalidad independientemente del orden de integración y/o del rango de cointegración en el sistema VAR estimado a través del sistema SUR (*seemingly unrelated regressions*), es decir, esta prueba es robusta respecto a las propiedades de integración y cointegración. El procedimiento utiliza la prueba estadística modificada Wald (MWald) para la restricción de los parámetros en el VAR (k), donde k es el orden de los rezagos del sistema. El estadístico MWald tiene una distribución asintótica Chi-cuadrada cuando el VAR (k+dmax) es estimado (donde dmax es el máximo orden de integración que se espera pueda ocurrir en el sistema). La prueba de causalidad de Toda y Yamamoto consiste en plantear el siguiente modelo:

$$IPC_{t} = a + \sum_{i=1}^{k} a_{i}IPC_{t-i} + \sum_{j=k+1}^{k+d\max} b_{j}IPC_{t-j} + \sum_{i=1}^{k} c_{i}IPP_{t-i} + \sum_{j=k+1}^{k+d\max} d_{j}IPP_{t-j} + e_{1t}$$
(1)

$$IPP_{t} = f + \sum_{i=1}^{k} g_{i}IPP_{t-i} + \sum_{j=k+1}^{k+d\max} h_{j}IPP_{t-j} + \sum_{i=1}^{k} m_{i}IPC_{t-i} + \sum_{j=k+1}^{k+d\max} n_{j}IPC_{t-j} + e_{2t}$$
(2)

Donde:  $e_{1t}$  y  $e_{2t}$  son los errores ruido blanco con media cero, varianza constante y no autocorrelación. La causalidad en el sentido de Granger va del índice nacional de precios al productor ( $IPP_t$ ) al índice nacional de precios al consumidor ( $IPC_t$ ) si  $c_i \neq 0$ ,  $\forall i$  en la ecuación 1. De igual forma, para la ecuación 2 la causalidad en el sentido de Granger va de  $IPC_t$  a  $IPP_t$ , si  $m_i \neq 0$ ,  $\forall i$ .

### RESULTADOS

Los datos del IPC y IPP para los tres países fueron tomados del International Financial Statistics del Fondo Monetario Internacional. La información es trimestral y está expresada en logaritmos naturales durante el periodo 1957:01-2011:04. Es importante comentar que se aplicaron las pruebas de raíz unitario Dickey-Fuller (DF) o Dickey-Fuller Aumentada (DFA) y la Phillips-Perron (PP), y los resultados indican que el índice de precios del productor y del consumidor para los tres países es de orden de integración 1, excepto el índice de precios del consumidor de Canadá, que tiene un orden de integración de 2 (por razones de espacio no fue incluido en el documentos). Sin embargo, es posible que estos resultados sean diferentes al incorporar cambios estructurales y, por consiguiente, mejorar la especificación de las pruebas de raíz unitaria. Para tomar en cuenta la posible presencia de cambios estructurales, se procedió a aplicar la prueba LS. A excepción del índice de precios del productor de Canadá, todas las series de precios de los tres países tienen raíz unitaria (Tabla 1). Los resultados de esta última prueba ratifican lo encontrado por la pruebas DF o DFA y PP, de que las series no son estacionarias en niveles, excepto los precios del productor de Canadá para el caso de la prueba LS. También, el índice de precios del consumidor de Canadá es posible que sea de orden de integración 2 de acuerdo con la prueba DFA. Entonces, el máximo orden de integración de las series sería de 2, información importante que debe ser tomada en cuenta para la aplicación de la prueba de causalidad de Toda y Yamamoto.

Variables	Tipo de Modelo	<b>Cambios Estructurales</b>	Estadístico LM	Rezagos
México				
IPP	Modelo C	1979:04/1988:04	-3.906	3
IPC	Modelo C	1975:01/1990:02	-4.462	8
Estados Unidos				
IPP	Modelo C	1972:04/1984:01	-3.625	1
IPC	Modelo C	1969:03/1983:01	-4.495	5
Canadá				
IPP	Modelo C	1972:03/1984:04	-5.188*	8
IPC	Modelo C	1967:03/1983:03	-4.518	Ř

Tabla 1: Prueba secuencial de raíz unitaria LS

Nota: los valores críticos para los niveles de significancia del 1% (\*\*\*), 5% (\*\*) y 10% (\*) del estadístico LM son -5.82, -5.28 y -4.98 respectivamente para el Modelo C (Lee y Strazicich, 2003). Fuente: elaboración propia.

Una vez conocido el orden de integración de las series, los resultados de la prueba de causalidad se muestran en la Tabla 2. Para el caso de México la casualidad va de los precios del productor a los precios del consumidor. El resultado de esta causalidad de los precios en ambos sentidos para el caso de México, es similar a lo encontrado por Sidaoui *et al.* (2009), quienes argumentan que la causalidad va del IPP a PPC durante el periodo enero 2001 a junio 2009. Por su parte para Estados Unidos, existe una causalidad bidireccional, lo que indica que la información de los precios del productor es útil para mejorar los pronósticos de la inflación de los precios del consumidor, ya que la causalidad va de los precios del productor a los precios del consumidor, y también, que los precios del consumidor son de utilidad para mejorar los pronósticos de inflación de los precios del productor. Par al caso de Canadá la causalidad va de los precios del consumidor a los precios del productor.

Tabla 2: Resultados de la causalidad de Toda y Yamamoto

Hipótesis nula	México	Estados Unidos	Canadá
IPC no causa a IPP	10.141	21.919***	16.545***
IPP no causa a IPC	40.113***	20.876***	6.618

\*\*\*, \*\* y \* significativo al 1%, 5% y 10% respectivamente. Fuente: elaboración propia.

### CONCLUSIONES

Conocer la relación de causalidad entre el IPC y IPP es de gran utilidad para los bancos centrales de los tres países, ya que uno de los objetivos importantes es la estabilidad del poder adquisitivo de la moneda nacional. En la literatura sobre la relación de causalidad entre IPC y IPP existen dos mecanismos que explican la dirección de causalidad entre ellos, por el lado de la demanda y por el lado de la oferta, respectivamente. En la presente investigación se analizó la relación de causalidad entre el IPC y el IPP para el caso de México, Estados Unidos y Canadá. Los resultados indican que todas las series de precios están integrados de orden 1, excepto el índice de precios del consumidor de Canadá que es de orden de integración 2. El análisis de la relación de causalidad muestra que la dirección va en ambos sentidos para Estados Unidos. La información de los precios del productor es útil para mejorar los pronósticos de inflación de los precios del productor. Para el caso de México, los precios del productor causan a los del consumidor, este resultado coincide con los resultados presentados en el trabajo de Sidaoui *et al.*, (2009), para una muestra de enero 2001 a junio 2009. Para el caso de Canadá, la causalidad va de los precios del consumidor a los precios del productor.

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# ANALISIS DEL OUTSOURCING EN MEXICO

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### RESUMEN

El outsourcing es una figura en la cual se da una relación triangulada entre una empresa externa que contrata directamente empleados para que estos desarrollen las actividades o trabajos en la empresa usuaria o contratante que tiene una relación comercial con la empresa externa. El Sistema de Administración Tributaria ha emitido un criterio en el que establece que las personas físicas o morales que realicen o contraten servicios de outsourcing están incurriendo en una práctica indebida, a partir de este decreto se genera una incertidumbre por parte de las empresas mexicanas respecto a la legalidad de recurrir a los servicios de outsourcing. El presente estudio se enfoca a analizar el outsourcing en México, cuya pregunta de investigación es ¿el outsourcing es una figura legal en México? se realiza en Ensenada, Baja California México elaborándose como una investigación cualitativa en la cual se utilizaron fuentes primarias, secundarias y terciarias. Con el objetivo de generar una herramienta de consulta en la cual se describan las obligaciones fiscales de las empresas que ofrecen y contratan los servicios de outsourcing. Del análisis exploratorio practicado se obtiene como resultado que la Ley Federal del Trabajo, ni Lev del Seguro Social y tampoco Ley del Impuesto Sobre la Renta contemplan el término, sin embargo la figura se regula a través de un decreto emitido por el Poder Ejecutivo. Con lo que se da respuesta a la pregunta de investigación obteniendo como resultado que el outsourcing es una figura legal en México.

PALABRAS CLAVE: Outsourcing, figura legal, subcontratación, Tercerización.

# ANALYSIS OF OUTSOURCING IN MEXICO.

# ABSTRACT

Outsourcing is a figure through which there is a triangular relationship between an external company that contracts directly used to develop these activities or work in the user company or contractor who has a business relationship with the foreign company. The Tax Administration given a judgment which states that individuals or entities that perform or hire outsourcing services are incurring undue practice, this decree from uncertainty generated by Mexican companies regard so legal or illegal use of outsourcing services. This study focuses on analyzing the outsourcing in Mexico, whose research question is how outsourcing is a legal form in Mexico? takes place in the city of Ensenada, Baja California Mexico elaborated as a qualitative research in which we used primary sources, secondary and tertiary. In order to generate a query tool in describing the tax obligations and hire companies offering outsourcing services. Practiced exploratory analysis result is obtained that the Federal Labor Law, and Social Security Law Act and neither the Income Tax contemplate the term, however the figure is regulated through a decree issued by the Executive. Thus answers the research question and getting answer that outsourcing is a legal instrument in Mexico.

JEL: K31, K34, K42.

KEYWORDS: Outsourcing, legal figure, subcontracting.

### INTRODUCCIÓN

En este mundo competitivo y global las empresas mantienen una búsqueda constante de nuevas estrategias que les permitan seguir en el mercado, una de las estrategias más utilizadas actualmente es la figura denominada "outsourcing", en los países de Norteamérica, y por su traducción al español en Latinoamérica y la Unión Europea es conocida como "subcontratación" o "tercerización". Esta estrategia les permite a las organizaciones reducir costos y contar con personal especializado; sin embargo como toda táctica competitiva conlleva ciertos riesgos como lo son: el no contar con un equipo especializado propio, desconocimiento del mercado del proveedor, y de los estándares de calidad. A pesar de las desventajas o riesgos la subcontratación continúa siendo una figura atractiva, ya que su tendencia va a la alza. Este trabajo de investigación se enfocara a realizar un análisis acerca de la legalidad del outsourcing, así como a indagar cual es el tratamiento fiscal que se recibe de acuerdo a las leyes mexicanas y definir si los trabajadores que prestan sus servicios bajo la modalidad del outsourcing ven alterados de alguna forma sus derechos laborales.

### Problemática

México ha sufrido grandes transformaciones en el ámbito económico, social y político en las últimas décadas. El aspecto laboral y las relaciones de producción también están en plena evolución, una muestra de ello es la subcontratación laboral, tercerización u outsourcing, este servicio cada vez es más contratado por las empresas mexicanas. Consiste en delegar a otras empresas especializadas, la ejecución de una serie de servicios que anteriormente asumían en forma directa a través de sus propios empleados, con el objetivo de disminuir el costo generado por mano de obra.Lo que la subcontratación busca es disminuir costos y aumentar la eficacia, con el propósito de que la empresa beneficiaria se concentre en su objetivo primordial. Esta modalidad tiene una presencia importante en nuestro país, al menos 2.4 millones de trabajadores se encuentran desempeñando funciones bajo esta figura1. Aproximadamente 500 empresas mexicanas reciben este tipo de servicio, aunque el mercado potencial supera las 5,000 firmas.

De acuerdo a cifras del Instituto Nacional de Estadística, Geografía e Informática (INEGI en adelante) conforme al censo 2009 en los 5 años anteriores se incrementó 58% el número de personas subcontratadas bajo esta modalidad de outsourcing. En este mismo periodo de tiempo se incrementó 8.6% del personal ocupado bajo esta modalidad y al 13.6%. En México el outsourcing se ha convertido en un tema polémico y de suma relevancia, sobre el que las autoridades fiscales y de seguridad social han puesto especial atención en las prestadoras de estos servicios, declarando una lucha constante contra las conductas de evasión, con la finalidad de evitar abusos, fraudes y simulaciones en contra de los trabajadores que se desempeñan bajo esta modalidad, señalando que buscan reducir la carga tributaria y las obligaciones fiscales, de acuerdo a lo manifestado en el comunicado de prensa 39/2008 publicado el 16 de junio del 2008 en página del Servicio de Administración Tributaria.

### METODOLOGÍA

En este apartado se hará una breve descripción del proceso a partir del cual se realizó la investigación, identificando el método de análisis implementado y los instrumentos utilizados. El presente estudio es de carácter fiscal realizado a través de una investigación cualitativa, la cual de acuerdo a Hernández Sampieri (2006) es un proceso inductivo debido que es necesario explorar, describir y generar perspectivas, su enfoque se basa en métodos de recolección de datos no estandarizados.El estudio se realiza a la Legislación Federal Mexicana relacionada con la figura del outsourcing; en específico a la Ley Federal de Trabajo, Ley del Impuesto sobre la Renta y Ley Seguro Social, realizando el estudio en la ciudad de Ensenada, Baja California, México. La investigación inicia con la recolección de información a través de fuentes primarias, secundarias y terciarias siendo éstas de acuerdo a lo descrito por Hernández Sampieri (2006): Fuentes primarias; investigación bibliográfica o revisión de literatura que proporcionan

datos de primera mano, pues se trata de documentos que contienen los resultados de los estudios correspondientes, como libros, antologías, artículos, tesis, disertaciones, documentos oficiales, reportes de asociaciones, trabajos presentados en conferencias o seminarios, artículos periodísticos, testimonios, videocintas en diversos formatos, foros y páginas de internet, entre otros.

Las fuentes secundarias; son listas, compilaciones y resúmenes de referencias o fuentes primarias publicadas en un área de conocimiento en particular, las cuales comentan artículos, libros, tesis, disertaciones y otros documentos especializados. Los que pueden encontrarse disponibles físicamente o por internet. Fuentes terciarias; se trata de documentos donde se encuentran registradas las referencias a otros documentos de características diversas y que compendian nombres y títulos de revistas y otros otras publicaciones periódicas, así como nombres de boletines, conferencias y simposios, sitios web, empresas, asociaciones industriales, títulos de reportes con información gubernamental, catálogos de libros básicos que contienen referencias y datos bibliográficos y nombres de instituciones nacionales e internacionales al servicio de la investigación, siendo útiles para citar fuentes no documentales tales como organizaciones que realizan o financian estudios, miembros de asociaciones científicas, instituciones de educación superior, agencias informativas y dependencias de gobierno que afectan investigaciones.

Posterior al acopio de las fuentes, se seleccionó y valuó la información pertinente a la subcontratación, entre estas fuentes utilizadas se encuentran la Ley del Impuesto sobre la Renta, la Ley Federal del Trabajo, la Ley del Seguro Social. El paso siguiente fue efectuar un análisis descriptivo de las fuentes, el cual consintió en ordenar, organizar la información y estudiar la figura del outsourcing desde el aspecto jurídico, laboral y fiscal, con el fin de interpretar los temas desarrollados buscando un enfoque explicativo. Como resultado del análisis efectuado se identifican las semejanzas, o en su caso diferencias del tratamiento que concibe la Ley del Impuesto sobre la Renta, Ley Federal del Trabajo y Ley del Seguro Social respecto a la figura del outsourcing.

# **DISCUSIÓN DE RESULTADOS**

Como resultado del análisis efectuado a la Legislación Mexicana pertinente a la subcontratación se encontró que el outsourcing no está contemplado como una figura regulada en la Ley del Impuesto sobre la Renta, la Ley Federal del Trabajo, la Ley del Seguro Social, sin embargo sí es aceptada la modalidad, originándose el derecho desde la Constitución Mexicana. Primeramente para respetar la supremacía de la Constitución Política de los Estados Unidos Mexicanos y tomando como punto de partida este ordenamiento es primordial recordar que a ninguna persona podrá impedirse que se dedique a la profesión, industria, comercio o trabajo que le acomode, siendo lícitos. Considerándose licito todo lo que no contravenga ninguna ley. También la Constitución contempla el derecho a realizar un trabajo digno y socialmente útil. De acuerdo a lo descrito en el párrafo anterior la subcontratación es una figura lícita, debido a que no está tipificada en ley como un delito.Por otro lado en la Ley Federal de Trabajo se maneja el término de intermediario, el cual se podría confundir con el "outsourcing"; sin embargo son modalidades diferentes de contratación. Este ordenamiento estipula que un intermediario es la persona que contrata o interviene en la contratación de trabajadores que van a prestar servicios a un patrón, en la intermediación aunque existen tres personas, el intermediario sólo actúa como enlace entre empleado y patrón, sin embargo en la subcontratación la empresa externa contrata los servicios personales de empleados para ofrecer servicios a empresas usuarias sin trasladar su personalidad de patrón.

### CONCLUSIONES

Los servicios de outsourcing se incorporan a la regulación mexicana a partir del decreto efectuado por el Presidente Felipe Calderón Hinojosa en abril del 2009, momento a partir del cual esta figura es completamente aceptada en México, ya que desde este momento se inicia a regular las empresas que ofrecen servicios subcontratados, tan es así que en este decreto se le imponen obligaciones a las empresas

que contraten servicios subcontratados y las que ofrezcan dichos servicios; estas obligaciones consisten en informar trimestralmente al Instituto Mexicano del Seguro Social sobre las operaciones subcontratadas en el mismo periodo. Con estas consideraciones se logra el objetivo de saber si el outsourcing es una figura legal aceptada en México, obteniendo la afirmación de ser plenamente legal prestar y contratar servicios subcontratados siempre que éstos se desempeñen con apego a lo establecido en los ordenamientos legales. En el aspecto laboral se concluye que los trabajadores que prestan servicios a través del outsourcing pueden estar tranquilos ya que tienen los derechos de cualquier otro empleado, como es el derecho a una retribución por sus servicios, a trabajar ocho horas si se trata de una jornada diurna, siete horas en el caso de la nocturna y siete y media para el caso de la jornada mixta; a recibir los instrumentos y herramientas necesarias para desarrollar su trabajo.

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# PROPUESTA ECOPEDAGOGICA PARA UN DESARROLLO SOSTENIBLE: ITINERARIO ECOTURISTICO, HISTORICO Y CULTURAL EN LA SIERRA DE ZONGOLICA, VERACRUZ MEXICO

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## RESUMEN

Ante el devenir histórico que conlleva a una serie de procesos de avances tecnológicos sin precedentes en la historia de la humanidad, se ha considerando a la globalización como un modelo de dominación política, económica y cultural totalitaria, contribuyendo a la perdida de la identidad cultural histórica patrimonial. Bajo este contexto, la educación tiene como principal objetivo contribuir a un retrato vívido y critico que transmite las complejas realidades del entorno económico, social cultural y ecológico de la sierra de Zongolica (Tzan-Coliuh-Can), que significa "Lugar de la cabeza enmarañada" o "lugar de cabellos crespos" integrada por 14 municipios, de los cuales entre el 90% y el 100% de su población es indígena, hablante del idioma Náhuatl, los paisajes de esta tierra son de una extraordinaria belleza. La importancia del itinerario turístico sostenible como un medio viable para transmitir valores y memorias a la nuevas generaciones, es por ello que la investigación busca detonar el desarrollo económico y social de la Sierra de Zongolica Veracruz, que revalore la memoria histórica regional, va que a través de la investigación se fomentara el análisis, la reflexión y la creatividad para desarrollar gestiones turísticas sostenibles que permitan integrar conocimientos históricos que coadyuven al entorno ecológico de la región como parte de un itinerario integral, para promover el turismo nacional e internacional en la zona, que genere empleos, a través de la Propuesta Ecopedagogica para un Desarrollo Sostenible: Itinerario Ecoturístico, Histórico y Cultural en la Sierra de Zongolica, Veracruz, México.

PALABRAS CLAVE: Sostenible, Ecopedagogía, Cultural, Histórico, Ecoturismo, Zongolica

# ECOPEDAGOGICA PROPOSAL FOR SUSTAINABLE DEVELOPMENT: ITINERARY ECOTOURISM, CULTURAL HISTORY AND THE SIERRA DE ZONGOLICA, VERACRUZ, MEXICO.

### ABSTRACT

Given the historical progression that leads to a series of technological processes unprecedented in the history of mankind, has been considering globalization as a model of political, economic and cultural totalitarian, contributing to the loss of cultural identity, historical heritage. In this context, the main objective of education is to contribute to a lively and critical portrait that conveys the complex realities of the economic, social, cultural and ecological of the Sierra de Zongolica (Tzan-Coliuh-Can), which means "Place of the head tangled "or" place of curly hair "composed of 14 municipalities, of which between 90% and 100% of the population is indigenous Nahuatl language speaker, the landscapes of this land are of extraordinary beauty. The importance of sustainable tourist itinerary as a viable means for transmitting values and reports to the new generations, which is why the research seeks to trigger economic and social development of the Sierra de Zongolica Veracruz, which reassess regional historical

memory as a through research would encourage the analysis, reflection and creativity to develop sustainable tourism efforts to integrate historical knowledge that contribute to the ecological environment of the region as part of a comprehensive itinerary, to promote domestic and international tourism in the area, generating jobs through Ecopedagogica Proposal for Sustainable Development: Itinerary Ecotourism, Cultural History and the Sierra de Zongolica, Veracruz, Mexico.

### **JEL:** 12, L8, Q2

KEYWORDS: Sustainable Eco-pedagogy, cultural, historical, Ecotourism, Zongolica.

## INTRODUCCIÓN

El magno paisaje natural de la sierra de Zongolica refleja la proclividad de un paso inagotable de tradición y cultura de una herencia patrimonial construido por cada uno de sus habitantes a lo largo del tiempo, habitada por los Nonoalcas provenientes de la gran tula, dejando una herencia cultural que hasta el día de hoy los habitantes actuales hacen esfuerzo por preservarla como un Patrimonio que es mucho más que el conjunto de edificaciones y de espacios, es la organización de la comunidad misma, el calendario ritual y ceremonial, son las fiestas, las expresiones artísticas, los espacios de convivencia, es todo aquello que en conjunto configura lo que realmente puede calificarse, el ámbito vital. Lo cual implica un medio cultural, así como un ambiente sano que encuentra la armonía entre cultura y el medio ambiente. En el mundo contemporáneo se acentúan los rasgos más perniciosos de la globalización. En él, las ciudades y pueblos tienden a parecerse más cada día, sus habitantes adquieren bienes y hábitos de consumo cada vez más uniformes, pero también un elemento primordial que sirve para anclarnos en la realidad propia es remitirnos a nuestros rasgos identitarios: ese elemento es la cultura.

Hablando del estado de Veracruz, tan rico y diverso culturalmente, hay evidencias deprimentes del poder destructivo que tiene el progreso mal entendido en una gran parte de los poblados y ciudades con valor tradicional. Si bien, es cierto, la conciencia de preservar las tradiciones de las regiones con sus colores, sabores y el misticismo cada día gana terreno coadyuvando a la ecopedagogía para alcanzar un desarrollo sostenible al alcance de los habitantes menos favorecidos de nuestro estado. A pesar de tener los elementos naturales, culturales e históricos que enmarcan la Sierra de Zongolica hoy se encuentra olvidada totalmente por el turismo, desamparada de oportunidades de trabajo para sus ciudadanos aquí es, donde el peso histórico cultural local requiere ser ponderado y bien explicado, donde el patrimonio cultural entra contundentemente en juego para el crecimiento y desarrollo de cada una de las comunidades indígenas de esta gran sierra, explotando la belleza natural y toda costumbre cotidiana que genere espacios ecoturisticos sostenibles para crear los itinerarios que aprecien la historia, el valor al cuidado de la naturaleza, el valor de los trabajos artesanales, que permita contribuir a un cambio de mentalidad con el fin de desarrollar fuentes de empleo, colocando a la cultura en el centro para fortalecer la identidad local.Está realidad inmediata está insertada de tradiciones, que pertenecen a un patrimonio histórico representado por el lugar donde se vive: es la casa, la calle, la iglesia, el Palacio Municipal, el mercado, la ropa tradicional, el parque, el panteón, el campo de cultivo, la naturaleza misma, la medicina tradicional, los mitos y leyendas, la fiesta patronal, es el pueblo la expresión más íntima y entrañable, la imagen más obvia de nuestra pertenencia cultural. Si esa imagen se fractura, se mancha y se deforma, la vida cultural en su conjunto se ve ultrajada.

Es por ello que la "Propuesta ecopedagogica para un desarrollo sostenible: Itinerario ecoturístico, histórico cultural en la Sierra de Zongolica, Veracruz México", representa una revalorización de la identidad local-global cuyo objetivo es formar una cultura ecopedagógica que permita el desarrollo sostenible de la implementación de itinerarios histórico culturales como medio desarrollo económico que fortalezca la calidad de vida de los habitantes de los 14 municipios de la Sierra de Zongolica.

### Ecopedagogía

Las Naciones Unidas han instituido la educación para un futuro sostenible (2005-2014) designada por la UNESCO como un órgano de promoción para el desarrollo. La ecopedagogía "es la educación para la actuación responsable hacia el ambiente y, a la vez es una educación por el ambiente." (Gadotti Moacir, 2003). La ecopedagogía tiene sus antecedentes en Rosseau quien destaca la importancia de tres entornos o marcos que son: entorno físico o natural, el artificial o creado por el ser humano y el medio social, los que se ven implícitos en el concepto de ecoformación. Los aspectos que se ven representados trasmiten valores de vida en la formación de las personas. También se puede expresar que la ecopedagogía conlleva una ecoformación que reúne la educación ambiental incluyente en el desarrollo sustentable. El objetivo de la ecopedagogía es enseñar a las personas a cuidar el entorno inmediato desarrollando una cultura ecológica y transmitiendo los valores que son parte de la identidad cultural a través de la participación social.Podemos apreciar que la ecopedagogía es "la escuela ciudadana, gestora del conocimiento, no aleccionadora con un proyecto ecopedagógico, esto es, ético-político, una escuela innovadora, constructora de sentido y comprometida con el mundo". Se puede apreciar que la escuela propicia la formación de los valores "Mujeres y hombres, seres históricos y sociales, nos volvemos capaces de comparar, de valorar, de intervenir, de escoger, de decidir" [...] (P, 1990) Se concluye que la ecopedagogía es un medio de concientización para los ciudadanos con la finalidad de cuidar al medio ambiente, y de valorar la identidad cultural local-global que es un legado histórico a través de dicha educación, que permite una revalorización de la identidad cultural.

### Sostenible

Hablar de sustentabilidad obliga a utilizar una definición más amplia y detallada que nos permita comprender el antecedente inmediato del término desarrollo sustentable. El concepto de sustentabilidad fue utilizado por primera vez en la Asamblea General de las Naciones Unidas en 1979, indicando que el desarrollo podía ser un proceso integral que incluyera dimensiones: culturales, éticas, políticas, sociales y ambientales, y no sólo económicas. Este término diseminado mundialmente mediante los informes del Worldwatch Institute en el decenio de los ochentas y particularmente por el informe "Nuestro futuro común", emitido por la Comisión de las Naciones Unidas para el Medio Ambiente y el Desarrollo, en 1987.En la Cumbre de la tierra llevada a cabo en Río de Janeiro en el año de 1992, se sientan las bases del desarrollo sustentable. Ahí se estableció una propuesta que contiene recomendaciones a los gobiernos para la constitución de los marcos legales adecuados al concepto desarrollo sustentable, que se denominó agenda 21. Posteriormente en 1998 el concepto tiene una connotación ecológica, no se centra exclusivamente a cuestiones ambientales, implica también sostenibilidad económica y social.

El desarrollo sostenible deberá ofrecer un sistema ecológicamente sano, económicamente viable y socialmente justo.El concepto sostenible o sustentable proviene de un término anglosajón "sustainable development", consagrado en el informe de la Primer Ministro de Noruega Gro Brundtland denominado "Nuestro Futuro Común". Por lo tanto el desarrollo sustentable (o sostenible) es el desarrollo que satisface las necesidades de la generación presente, sin comprometer la capacidad de las generaciones futuras, para satisfacer sus propias necesidades.

Cabe destacar, [...] "que el término sostenible en cuanto a la traducción en español presenta dificultad, conserva en toda su dimensión el verdadero y original sentido significado, dando lugar a dos términos. Uno, desarrollo sustentable, mayormente utilizado en Latinoamérica y sostenido por prestigiosos científicos como Cano, y el otro término es desarrollo sostenido, utilizado en España, defendido entre otros por Serrano Moreno y Martín Mateo" (Carta de Itinerarios Culturales, 2008) De acuerdo con lo anterior, se puede expresar que el término es considerado como sinónimo y se utiliza indistintamente, sin embargo el concepto en español no logra revelar la total dimensión anglosajona, puesto que este tiene una visión dinámica, no estática que hace referencia a un proceso continuo que hay que mantener a lo largo

del tiempo, en cambio, el término español, tiene una connotación más estática de conservación. Es por ello, que se ha considerado el término anglosajón en la propuesta de investigación.

### Itinerarios Historicos Culturales

Con respecto a uno de los conceptos importantes para estudiar, es el término itinerario cultural, "Ofrece un marco privilegiado para una dinámica de comprensión mutua, de lectura plural, de historia y de una cultura de la paz. Se fundamenta en los movimientos de la población al encuentro y el diálogo, el cambio y la interfecundación de las culturas y del tiempo." (Carta de Itinerarios Culturales, 2008). De acuerdo con lo anterior, se puede señalar que el concepto de itinerario cultural refiere a un carácter acierto, dinámico y evocativo, que resume a un estudio local-global que permite el reconocimiento dentro del patrimonio, las dimensiones económicas, sociales, simbólicas y filosóficas que se relacionan con el medio natural en su diversidad. Otro de los aspectos a considerar en el término de "itinerario cultural puede ser considerado como un tipo cultural y dinámico de paisaje cultural. La identificación se basa en puntos fuertes y de elementos tangibles, se establece en relación con el marco natural y la dimensión intangible [...]" (Carta de Itinerarios Culturales, 2008).

El itinerario cultural se puede comprender más allá que una ruta turística que transmite la preservación de los monumentos históricos, calles, plazas, panteones, parques, iglesias, mercados e industrias que forman parte la memoria histórica local. Un itinerario cultural conecta e interrelaciona geografía y bienes patrimoniales muy diversos, formando un todo unitario. En los itinerarios culturales y en su entorno están presentes sus diversos paisajes naturales o culturales, que son uno más entre los componentes del itinerario. La protección y conservación de los itinerarios culturales sostenibles exigen un conocimiento profundo de las características históricas, naturales y culturales de su entorno. Las intervenciones que resulten necesarias deberán integrarse en ese contexto respetando sus rasgos definitorios, facilitando su lectura, y no distorsionando el paisaje tradicional, ya sea este natural, cultural o mixto.

### Generalidades De La Sierra De Zongolica.

La Sierra de Zongolica (*Tzan-Coliuh-Can*), cuyo nombre significa "*Lugar de la cabeza enmarañada*" o " *lugar de cabellos crespos*", región habitada principalmente por indígenas nahuas, se encuentra localizada en la región montañosa del centro del estado de Veracruz México dentro de la Sierra Madre Oriental, su clima es templado-húmedo-extremoso con una temperatura promedio anual de 17.4°C; su precipitación pluvial media anual es de 2,270.1 mm., la vegetación es de tipo bosque alto perennifolio y bosque tropical caducifolio, integrada con especies como: cedro, palo mulato, xochicuauilt, encino, oyamel, guarumbo una extensa variedad de árboles frutales como el jinicuil, tejocote, zapote blanco y negro, guayabos, chinene, durazno, pera, nísperos, naranja malta, nogal, diferentes tipos de plátano, chirimoya; su fauna cuenta con una gran variedad de animales silvestres, entre los que se encuentran:

ocelote, gato montés, temazate, tepezcuintle, conejo, tejón, mapache, ardilla, zorro, tlacuache, cacomixtle, reptiles, aves, peces y un sin fin de insectos. La Sierra de Zongolica está integrada por 14 municipios, Astacinga, Atlahuilco, Los Reyes, Magdalena, Mixtla de Altamirano, Rafael Delgado, San Andrés Tenejapan, Soledad Atzompan, Tehuipango, Tequila, Texhuacan, Tlaquilpa, Xoxocotla y Zongolica. Los habitantes de la Sierra de Zongolica se dedican principalmente a la Agricultura, siembran frijol, maíz, hortalizas para autoconsumo y venta regional, café, cultivan flores de temporada como el cempasúchil, moco de pavo, lirios, alcatraz, nube, gladiola, crisantemos entre otras. En cuanto a la ganadería solo para autoconsumo principalmente de ganado menor como cerdos, ovinos, caprinos y cría de aves de corral. Una actividad que ha repercutido fuertemente en la Sierra de Zongolica es la creación de cooperativas artesanales de muebles de madera por lo cual la deforestación de esta región llego a ser muy importante aunque se ha venido revirtiendo con diversos programas de reforestación.

En general, la economía de la Sierra de Zongolica es precaria, la riqueza se encuentra distribuida solo en algunas familias, debido al caciquismo, al haber muy pocas fuentes de empleo sus habitantes se ven obligados a emigrar a las ciudades en busca de trabajo principalmente los jóvenes los cuales van perdiendo identidad cultural, la riqueza en tradiciones usos y costumbres de los 14 municipios que la integran es vasto en gastronomía, religión, artesanías, en una cotidianidad que se transmitido de generación en generación, el rezago educativo en la Sierra de Zongolica está siendo combatido en todos los niveles por las autoridades gubernamentales federales y estatales que han incrementado la inversión en este rubro, tal es el caso de la Universidad Veracruzana con dos sedes la Universidad Intercultural ubicada en el municipio de Tequila inaugurada en el año 2004 y la Casa de la Universidad Veracruzana en Atlahuilco creada en 2008, de igual manera se creó en el año 2003 el Instituto Tecnológico Superior de Zongolica, en 2011 abrió un campus en Tehuipango y en Tequila, cabe señalar que es el único actualmente en México que opera totalmente en Nahuált. En salud la proporción de médicos por cada mil habitantes de los 14 municipios que integran la Sierra de Zongolica es de 1.1 médicos por cada mil habitantes de un total de 176,606 habitantes (INEGI, 2011).

Tabla 1: Comparación de los Indicadores de desarrollo de los 14 Municipios de la Sierra de Zongolica.

Municipio	Grado de Marginación	Grado de Desarrollo Humano	Nivel de Desarrollo Social
Astacinga	Muy Alto	Medio Bajo	Muy Bajo
Atlahuilco	Muy Alto	Medio Bajo	Muy Bajo
Los Reyes	Muy Alto	Medio Bajo	Muy Bajo
Magdalena	Muy Alto	Medio Bajo	Muy Bajo
Mixtla de Altamirano	Muy Alto	Medio Bajo	Muy Bajo
Rafael Delgado	Álto	Medio	Muy Bajo
San Andrés Tenejapan	Muy Alto	Medio Bajo	Muy Bajo
Soledad Atzompa	Muy Alto	Medio Bajo	Muy Bajo
Tehuipango	Muy Alto	Medio Bajo	Muy Bajo
Tequila	Muy Alto	Medio Bajo	Muy Bajo
Texhuacan	Muy Alto	Medio Bajo	Muy Bajo
Tlaquilpa	Muy Alto	Medio Bajo	Muy Bajo
Xoxocotla	Muy Alto	Medio Bajo	Muy Bajo
Zongolica	Álto	Medio	Muy Bajo

Fuente INEGI 2012, diseño propio.

La tabla anterior muestra el rezago económico, social y humano que sufren los 14 municipios y sus comunidades de la Sierra de Zongolica, Veracruz México, entendiendo por marginación a el fenómeno vinculado a condiciones de pobreza material, que impiden al individuo o grupo a no tener acceso a un nivel medio equiparable de calidad de vida, en relación a la situación económica esta permanece estancada, sin crecimiento en ningún sector, con disminución de empleo, disminución de la demanda.

### Propuesta De Itinerario Historico Cultural De La Sierra De Zongolica Veracruz Mexico.

La propuesta tiene como objetivo que las comunidades de la Sierra de Zongolica se beneficien con un itinerario que genere empleos, atrayendo turismo nacional e internacional que permita la reactivación de la economía en todos los ámbitos (ecoturismo, artesanales, gastronómicos y culturales).

Para ello se requiere promover una visión ecopedagógica que eduque a los ciudadanos con la finalidad de contribuir al cuidado del medio ambiente de la Sierra de Zongolica, para desarrollar oportunidades laborales a través del itinerario cultural y se deberá fundamentar en los criterios de sostenabilidad.

*ASTACINGA:* Proviene de las voces nahuas Azta-zin-can que significa "Lugar de las pequeñas garzas" Figura del lenguaje para indicar en el lugar de la blancura venerable.

*Reseña Histórica:* Durante la época prehispánica formó parte de los Nonoalcos llamados "Pinones", asentados en la región de Zongolíca.

*Fiestas, Danzas y Tradiciones :* El 15 de agosto se lleva a cabo su fiesta titular en honor a la virgen de la Asunción.

Artesanías: La elaboración de jorongos de lana y chaquetas, los representan.

Gastronomía: Los platillos elaborados a base de quelites y de hongos en sus diversas presentaciones.

*ATLAHUILCO:* Es voz náhuatl Atl-tlauil-ko que significa "En el agua clara o iluminada" y es posiblemente reducción de Atlahimolco, sitio mítico referido en la migración nonoalca-chichimeca

*Fiestas, Danzas y Tradiciones :* Del 11 al 12 de noviembre se lleva a cabo la fiesta de carácter religioso en honor a San Martín Caballero, patrono del lugar. Durante la fiesta se ejecutan una serie de danzas como la de los Tocotines, Moros y Cristianos y a petición del mayordomo, los Xochicolohke (negritos o panaderos).

LOS REYES: Anteriormente Cozca-Tlán; del náhuatl que significa "Lugar de joyas o Collares".

*Fiestas Tradiciones y Danzas*: Del 5 al 7 de enero se celebra la Fiesta de Los Santos Reyes.

*MAGDALENA:* Voz Náhuatl que significa. "Lugar lleno de pilares". En 1831 se le denominó Santa María Magdalena Tlamimilola que significa "Lugar de Altozano y cuesta pequeña.

Monumentos Históricos: El Palacio municipal y la iglesia son considerados monumentos históricos.

*Fiestas Tradiciones y Danzas:* El 21 y 22 de julio se celebran las fiestas religiosas en honor de Santa María Magdalena, patrona del pueblo. Los días 1 y 2 de noviembre se festeja a Todos los Santos y Fieles Difuntos, es tradicional que en esta fecha acuda la gente del pueblo al panteón a adornar con flor de cempoalsuchitl las tumbas donde descansan los restos de sus familiares fallecidos; además en sus viviendas instalan altares con ofrendas de pan de muertos, conejos, naranja, plátano, chayote cocido, chocolate y flor de cempoalsuchitl.

*Artesanías*: La artesanía típica consiste en la elaboración de prendas de vestir de lana, en pequeña escala, en telares de cintura.

*Gastronomía*: El municipio cuenta con platillos típicos como son: Mole con carne de guajolote, tamales de frijol, tamales de chile, xocotamales y atole de maíz.

*Atractivo Natural*: El atractivo turístico son las cavernas de Tzontecomoztok, que cuentan con una pequeña laguna en el interior.

*MIXTLA DE ALTAMIRANO:* Del náhuatl literal Mixtli, nube; tlan, (abundancial); significa "Lugar de nubes abundantes", otros dicen que su significado más profundo es el de Mixkoatl, dios de pueblos cazadores recolectores, más conocido por chichimecas, indios bárbaros, o sea bravos y salvajes

*Personaje Ilustre:* Ignacio Manuel Altamirano 1834-1893, Abogado, publica poesía, cuento y novelas, entre las cuales destacan Clemencia, Navidad en las montañas y el Zarce.

*Fiestas Tradiciones y Danzas:* Entre los últimos días de febrero y los primeros días de marzo, se celebra el Carnaval mediante juegos populares. El 15 de agosto es la fiesta en honor a la Virgen de la Asunción, en la cabecera municipal. El 1 y 2 de noviembre rinde tributo a Todos los Santos. El 29 y 30 de

noviembre se lleva a cabo la fiesta titular en honor de San Andrés Apóstol, patrono del lugar, con danzas autóctonas y folklóricas, juegos pirotécnicos, actos religiosos, carreras de caballos y torneo de cintas. Una de las tradiciones en sus bailables es el de Xochipitzahuak (flor menudita), consiste en el festejo que se realiza en la casa de la novia y donde se hacen honores para el pedimento de la joven a quien se pretende desposar.

*Artesanías* : Las fajas de hilo con colores vistosos, mangas y cotones de lana pura, tlacpiales (hilos que sirven de adorno para el cabello largo, de vistosos y variados colores), ollas de barro cocido, comales y algunos utensilios de cocina.

*Gastronomía*: El Xopocotamale, es un tamal elaborado de forma especial, para las mayordomías y casamientos, que contiene una hierba de conocimiento solo de los nativos.

El Tonilzint que es un caldo de frijoles tiernos, lo que proporciona un agradable y especial sabor, condimentado con hierba de olor.

Rafael Delgado: Se le denomina así en honor al gran escritor cordobés.

*Fiestas, Danzas y Tradiciones:* Del 22 de mayo al 4 de junio se lleva a cabo la fiesta religiosa en honor de San Juan, patrono del pueblo, con bailes populares, actos religiosos, juegos mecánicos, carreras de caballos y torneo de cintas y eventos deportivos. La última semana de mayo se celebra la Feria de la Flor, con bailes.

*Música:* La representativa es el "Xocotamal Sontsin", que se toca con instrumentos como el violín, guitarras y maracas.

Gastronomía: El mole con carne de pavo.

SAN ANDRES TENEJAPAN: Tenex-apan, es voz de origen náhuatl que significa "En el agua de la cal".

Monumentos Históricos: Iglesia de San Andrés Apóstol y la Pirámide de Teopancahualco.

*Fiestas Tradiciones y Danzas*: El 2 de febrero es la fiesta religiosa en honor de la Virgen de la Candelaria. El 30 de noviembre se celebra la fiesta patronal de San Andrés, empieza con la víspera; en caso de ser entre semana se cambia al domingo próximo, realizándose juegos pirotécnicos, música, danzas de moros, pastorelas, procesiones y feria. El 12 de diciembre es la fiesta de la Virgen de Guadalupe, empieza la víspera, se celebra la octava con juegos pirotécnicos, música y danzas.

*Gastronomía* : Carnitas; tamales de frijol, de chile con carne; mole de guajolote; atole champurrado de cacao o de Yoloxochitl (flor de corazón), memelas o picadas.

*Atractivos Naturales:* Balneario, afluente que forma una gran represa de agua fría y cristalina, rodeado de un clima templado-húmedo y vegetación de tipo bosque caducifolio. En el restaurante del lugar, hay música para bailar, el atractivo son dos puentes colgantes y el Cerro Petlacala (bosque).

*Soledad Atzompa:* El nombre es náhuatl y significa "En los cabellos del agua", tal vez en los arroyos que semejan una cabellera.

*Fiestas Tradiciones y Danzas*: El 2 de febrero se celebra la fiesta tradicional de la Candelaria, con danzas y procesiones.

*Artesanías*: Las fajas de hilo con colores vistosos, mangas y cotones de lana pura, tlacpiales (hilos que sirven de adorno para el cabello largo, de vistosos y variados colores).

Tehuipango: Tehui-pan-co. Es voz de origen Náhuatl que significa "En el paso transparente".

Monumentos Históricos: Ruinas Arqueológicas.

*Fiestas Tradiciones y Danzas*: El 25 de julio se celebra la fiesta religiosa de Santiago Apóstol, con bailes populares, juegos pirotécnicos carrera de caballos o torneo de cintas

Artesanías: Existen talleres de costura que realizan prendas de vestir y cobijas con coloridos contrastantes

Gastronomía : Flor de Maguey, Barbacoa de Borrego y Mole.

*TEQUILA:* Te-qui-lan, en lengua náhuatl que significa "Lugar de las Verduras en las Tierras", pero también puede ser "Lugar de Tributos ó Fuerzas".

*Reseña Histórica:* Los dominadores de la triple alianza colocaron ahí un Tequihua (lugar en donde se reunían los tributos) para ejercer su autoridad y de ahí el nombre, Tequila fue en la época prehispánica y durante el siglo XVI, la cabecera de una confederación de pueblos que comprendía el territorio ocupado actualmente por los municipios de Tequila, Atlahuilco, Magdalena, San Andrés Tenexpa, Xoxocotla.

*Fiestas, Danzas y Tradiciones:* Se realizan festejos el 1° de enero con motivo del año nuevo; en marzo o abril la celebración de la semana santa; el 29 de junio fiesta religiosa en honor de San Pedro, patrono del lugar; el 12 de octubre día de la raza; noviembre 1 y 2 Todos Santos; en diciembre 12 la celebración en honor a la Virgen de Guadalupe y festividad de santo Cristo y de fin de año.

Artesanías: Tejido en telar de cintura.

*Texhuacan:* San Juan Teoizhuacán es voz de origen Náhuatl y lugar de las divinas hojas verdes de maíz. "Totomoxtle o Vástago del elote". Teolt= Dios,ixtli= rostro, hua= dueño, can= lugar; "Lugar del dueño del rostro de Dios".

*Fiestas Tradiciones y Danzas*: Del 22 al 24 de junio se celebra la fiesta religiosa en honor al santo patrón "San Juan Bautista" fiesta popular con diversas manifestaciones tradicionales que se indican 20 días antes, El 1 y 2 de noviembre se festeja a todos los santos y fieles difuntos.

*Artesanías*: La artesanía tradicional está representada por prendas de vestir y blusas de estambre, lana o manta elaborados en telas de conjetura confeccionadas a mano y bordadas con colores como mangas, chalecos, líos, fajas y tlaljkuiales.

*Gastronomía*: El platillo más representativo es el mole de guajolote, tamales de frijol con hojas de aguacate y la bebida típica es la Caxtila hecha de jugo de caña fermentada con la raíz de un arbusto que se llama Timbre.

*Tlaquilpa:*Voz de origen Náhuatl, que significa "Lugar de albañiles". *Reseña Histórica*: Pueblo muy antiguo, tributo a la Triple Alianza, antes de la conquista española.

Monumentos Históricos: La iglesia o templo católico parroquial. Fiestas Tradiciones y Danzas: El 22 de julio se festeja la fiesta patronal de Santa María Magdalena, empieza la víspera con bailes, juegos pirotécnicos, músicos y procesiones.

*Artesanías :* Las derivadas de la Lana del Borrego, ya que es la única materia prima con que se cuenta en el Municipio, algunas de ellas son bolsas, chalecos, líos, tlakpiales (para el cabello). *Gastronomía:* La barbacoa de borrego con diversos aderezos, el mole y los tamales.

*Xoxocotla:* Xoxo-oco-tlan. Es voz de origen Náhuatl que significa "Lugar donde hay pinos verdes" o Xoxo "Lugar de ocotes viejos".

Monumentos Históricos: El principal monumento histórico del municipio es una iglesia católica.

*Fiestas Tradiciones y Danzas*: 2 y 3 de mayo: fiesta religiosa en honor a la virgen de Juquila. 14 y 15 de mayo: fiesta religiosa en honor a San Isidro Labrador. 11 y 12 de diciembre: fiestas en honor a la Virgen de Guadalupe.

*Artesanías*: La lana es uno de los materiales utilizados para la elaboración de las cobijas y mangas, así como el uso del estambre para el mismo fin.

*Gastronomía*: Los platillos típicos del municipio son el mole y la barbacoa de borrego.

Zongolica: De Tzontli, cabellera y Coliuhqui, retorcida. "Cabellera retorcida.

*Reseña Histórica*: Durante la época prehispánica fue una población nonoalca. En el siglo XVI fue cabecera de los reyes, Tlaquilpa, Mixtla, Asctancinga, Tehuipango, Texhuacan, Tezonapa, Coetzala y Omealca.

*Monumentos Históricos :* 2 iglesias el Calvario fundada en 1526, y la Parroquia de San Francisco de Asís, zona arqueológica de Tecuapa que fue saqueada y casi no hay vestigios de una pirámide, ex haciendas de Tlanecpaquila, Coyametla y Porvenir, en este último ya solo quedan ruinas, el cristo del cerro Cinco flores.

*Fiestas Tradiciones y Danzas* : Fiestas: el 2 de marzo en la gran cueva de Tomachapa, curanderos y danzantes se reúnen para dar gracias a la madre tierra por los beneficios recibidos.

*Artesanías*: En los mercados se encuentran tejidos de lana tenidos con colores, vegetales, fajas de seda, ollas, comales, vasijas, etc.

*Gastronomía* : Guisado de Quelites: quelites blancos, chile y especias. Tepaya: frijol asado y molido, picante, hoja de aguacate y manteca de cerdo. Texmole: pollo, chile, masa, jitomate, epazote.

*Atractivos Naturales:* Se puede apreciar "El Boqueron", puente natural de más de 25 metros de altura, cerca se encuentra el Popocalt en la congregación de Cutlaixco, donde el curso integro del río Coalt se suma para formar una cascada subterránea de más de 60 metros.

### RECOMENDACIONES

La realidad, de la Sierra de Zongolica Veracruz, atraviesa por una crisis de desarrollo económico, por lo cual es necesaria la creación de nuevos y estables empleos que puedan impulsar a los habitantes hacia una mejor calidad de vida, el turismo es una alternativa viable y sostenible que permita el crecimiento dinámico de los diferentes atractivos históricos, culturales y naturales que se puedan ofertar en cada municipio, la llegada de turismo a esta región representa la oportunidad de crear un foco de desarrollo regional por medio del cual el turista conozca parte de la historia de nuestro país, fomentando los valores en la conservación y protección de los sitios históricos con los que cuentan los municipios de la Sierra de Zongolica que cuenta también con áreas naturales de extraordinaria belleza brindando espacios para

actividades propias del ecoturismo. Para finalizar, la investigación tiende a promover un desarrollo sostenible que vincule el turismo con el patrimonio histórico - cultural que nos permita establecer un itinerario que valore el pasado, educando a las personas para respetar las tradiciones, la naturaleza, valorar los hechos históricos que forman parte de la identidad local y su cultura misma promoviendo con operadores turísticos el Itinerario Histórico Cultural y cultural de la Sierra de Zongolica".

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# EL MARKETING NOSTÁLGICO Y SU RELACIÓN CON EL CONSUMO DE PRODUCTOS DE MAÍZ EN LOS MIGRANTES MEXICANOS

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### RESUMEN

La investigación se realizó dentro de un enfoque mercadológico para identificar la relación del marketing nostálgico y el consumo de productos de nostalgia. El objetivo general fue identificar la relación del marketing nostálgico y el consumo de productos de maíz en los migrantes mexicanos ubicados en los Ángeles California, USA. Los resultados que se presentan corresponden a una investigación empírica sobre el consumo por nostalgia, usando un enfoque cuantitativo, logrando la aplicación del modelo Nostalgic mix para determinar la relación entre el marketing nostálgico y el consumo por nostalgia de productos de maíz. Para la presente investigación se utilizaron de forma práctica los conceptos novedosos de marketing nostálgico, mercado de nostalgia y consumo por nostalgia.

PALABRAS CLAVES: Marketing nostálgico, productos de maíz y migración.

# NOSTALGIA MARKETING AND ITS RELATIONSHIP WITH CORN CONSUMPTION OF MEXICAN MIGRANTS IN LOS ANGELES, CALIFORNIA.

# ABSTRAC

The research was conducted within a marketing focus to identify the relationship of nostalgia marketing and the consumption of nostalgia products. The general objective was to identify the relationship of nostalgia marketing and the consumption of corn products of migrant workers located in Los Angeles, California, USA. The results that are presented correspond to an empirical research on nostalgia consumption, using a quantitative focus, achieving the application of the Nostalgic Mix model to determine the relationship between nostalgia marketing and nostalgia consumption of corn products. For this research, it was used in practical form novel concepts of nostalgia marketing, nostalgia market and nostalgia consumption.

**JEL:** M3, M31, D1, D12, Q1, Q13, F2, F2.

KEY WORDS: Nostalgia marketing, corn products and migration.

# INTRODUCCIÓN

El marketing hoy en día, es una de las ciencias más importantes para que las empresas puedan ser competitivas en los mercados nacionales e internacionales, esta ciencia se ha ido diversificando cada vez más, al grado de poderse aplicar en diferentes contextos como: marketing de servicios, marketing turístico, marketing político, marketing religioso, etcétera. Pero no se han encontrado muchos estudios que relacionen la aplicación de marketing nostálgico en el consumo de productos de nostalgia. La presente investigación se encuentra organizada de la siguiente forma. En la sección de revisión de literatura se describen los conceptos de marketing nostálgico que comprenden los términos siguientes:

producto, mercado y consumo de nostalgia; consumo de maíz y migración. Posteriormente se presenta en una tabla, el resumen técnico del diseño de la metodología empleada en la investigación. Consecutivamente se presentan los resultados de la investigación, y finalmente se presentan las conclusiones.

### **REVISION DE LITERATURA**

Para presentar la revisión de la literatura se describirán a través de apartados, los siguientes conceptos: marketing nostálgico, consumo de maíz y migración.

### Marketing nostálgico

Hoy en día el marketing es una herramienta fundamental para toda empresa que desee identificar necesidades y deseos, innovar, distribuir, fijar precios y promocionar bienes y servicios, y gracias a esto el consumidor se convencerá de comprarlos o no. El marketing es una función de negocios indispensable para toda empresa que desee perdurar en un mercado competitivo.El marketing presenta diferentes enfoques de aplicación, entre los más usuales están: industrial, turístico, internacional, social, político, etc. Es necesario mencionar que cada vez surgen nuevos enfoques de marketing. El marketing nostálgico es otro enfoque novedoso y especializado que se dirige a los migrantes y su satisfacción de necesidades y deseos a través de los productos de nostalgia.

El marketing nostálgico es el proceso social en el cual una empresa y sus consumidores cumplen sus objetivos. Se compone de la aplicación de dos enfoques: la orientación del mercado y la función del marketing. El primero incluye las actividades de una empresa dirigidas a satisfacer las necesidades y deseos de los migrantes a través del intercambio de bienes y servicios de nostalgia, y el segundo incluye la administración del marketing mix (Burguete & Acle, 2012).

Para poder comprender los términos antes mencionados: producto, mercado y consumo de nostalgia que conforman el concepto de marketing nostálgico, primero será necesario entender qué es la nostalgia. La nostalgia es un sentimiento, estado de tristeza o melancolía que sufren los individuos cuando añoran o extrañan la pérdida de alguien o algo. Este concepto tiene una aplicación en diferentes contextos como: la tristeza o melancolía por familiares, amigos, compañeros, música, ropa, cine, juguetes, alimentos, etc. (Burguete & Acle, 2012). Producto de nostalgia según un estudio de la Comisión Económica para América Latina y el Caribe (CEPAL), se entiende como aquellas mercancías que integran "bienes y servicios que forman parte de los hábitos de consumo, cultura y tradición de los diferentes pueblos y naciones", y parte de la idea de que en el caso de los grupos sociales que emigran al extranjero, tienden a extrañar, a rememorar ciertos productos que forman parte de su vida cotidiana, productos y servicios que difícilmente pueden encontrar en sus lugares de destino (CEPAL, 2003).

Para la presente investigación se entiende por producto de nostalgia a un bien o servicio diferenciado que se compone de una serie de costumbres, tradiciones, hábitos de consumo que formaban parte de su vida cotidiana en su lugar de origen y que satisface necesidades y deseos de los migrantes al recordar, añorar su cultura en otro destino (Burguete & Acle, 2012). Los productos de nostalgia abarcan diferentes bienes y servicios desde ropa, música, alimentos, muebles, regalos, artesanías, restaurantes, entrenamiento, etc. Entre los más demandados están los bienes de consumo (alimentos, bebidas y abarrotes). El mercado de nostalgia es el grupo de migrantes con necesidades y deseos específicos de productos de nostalgia, así como de dinero y voluntad para gastar. Dicho mercado se compone de productos de nostalgia que demandan millones de migrantes de primera y segunda generación y refleja buena parte de las tradiciones culturales de sus regiones de origen. (Burguete & Acle, 2012).

El consumo por nostalgia es: la acción y el efecto de los migrantes, por adquirir productos de nostalgia, que representaban una serie de costumbres, tradiciones, hábitos de consumo que formaban parte de su vida cotidiana en su lugar de origen y que satisface necesidades y deseos al recordar, añorar su cultura en otro destino (Burguete & Acle, 2012). Dicho consumo trata de una demanda permanente, no asociado a la moda sino a la cultura y al arraigo de los países de origen. Se considera que no es un mercado ni un deseo, se trata de una acción y efecto de adquirir productos de nostalgia por parte de los migrantes que activa la demanda en el mercado de nostalgia.

Por último es necesario mencionar el uso del modelo *Nostalgic mix* para medir el marketing nostálgico y su relación con el consumo de productos de nostalgia, por parte de los migrantes de cualquier país. El modelo *Nostalgic mix* se define como una abstracción de un sistema de relaciones entre el marketing mix, los migrantes y su consumo por nostalgia (Burguete & Acle, 2012). Este modelo presenta alcances y ventajas que a continuación se enumeran. Ver Figura 1.

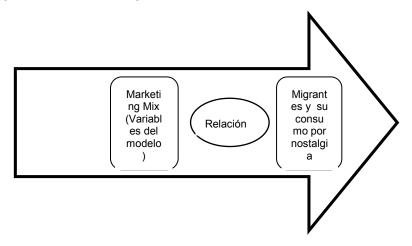
- 1. Obtener un conocimiento y diagnóstico sobre el mercado de los migrantes.
- 2. Obtener un conocimiento y diagnóstico sobre el consumo por nostalgia.
- 3. Permite una medición cuantitativa del consumo por nostalgia.
- 4. Flexibilidad en cuanto a la selección de un modelo de marketing mix.
- 5. Flexibilidad en cuanto a la selección del mercado meta (migrantes).
- 6. Flexibilidad en cuanto a la selección del producto de nostalgia.

A manera de conclusión la nostalgia representa el sentimiento de melancolía que sufre el migrante en un lugar diferente al de su origen. Esto detona la adquisición de productos de nostalgia para satisfacer sus necesidades y deseos. Es necesario tomar en cuenta que la nostalgia es sufrida por cualquier migrante en un producto de nostalgia y lugar del mundo.

### Productos De Maíz

La cocina y los alimentos han sido estudiados por disciplinas como la antropología y la sociología, dentro de los cuales destacan autores clásicos como Claude Lévi-Stauss, Marvin Harris y Jessica Kuper, con valiosas aportaciones que nos permiten reconocer la autenticidad que un grupo social refleja a través de su gastronomía y los elementos que invierten en dicho proceso como factor generador de identidad social, temporal y espacial. Pero es interesante mencionar que desde el contexto del marketing nostálgico y la influencia que ejerce en el consumo de alimentos de la cocina tradicional mexicana existen muy pocos estudios La cocina y los alimentos representan el conjunto de las costumbres de un pueblo marcado siempre por un estilo y dichas costumbres forman sistemas y tales sistemas no existen en número limitado (Lévi- Strauss, 1977). Cuando se cocina, se repiten de manera invariable, una serie de recetas, fórmulas y técnicas culturales que impiden la arbitrariedad; es por lo tanto una forma cultural, el área práctica y teórica donde se reproducen los mitos, las tradiciones, los conceptos e identidad de una comunidad.

### Figura 1: Modelo Nostalgic Mix.



En esta figura se muestra la representación gráfica del modelo Nostalgic Mix; este modelo permite medir el Marketing Nostálgico y su relación con el consumo de productos de nostalgia por parte de los migrantes. Así mismo presenta los siguientes alcances y ventajas: obtener un conocimiento y diagnóstico sobre el mercado de los migrantes, obtener un conocimiento y diagnóstico sobre el consumo por nostalgia, permite una medición cuantitativa del consumo por nostalgia, flexibilidad en cuanto a la selección de un modelo de marketing mix, flexibilidad en cuanto a la selección del mercado meta, flexibilidad en cuanto a la selección del producto de nostalgia. Fuente: (Burguete & Acle, 2012).

Los alimentos satisfacen directamente la necesidad fisiológica del hambre de los individuos y son portadores de mensajes y de significados simbólicos. La alimentación integra parámetros culturales propios del lugar donde habitan, como código o regla de prácticas y costumbres religiosas, ambientales y de carácter filosófico, económico o social de un determinado lugar. La cocina forma parte de un lenguaje que expresa una parte de lo que es la sociedad. Es así como la cocina y la alimentación están relacionadas con la historia, con lo que somos y a lo que pertenecemos, es decir con nuestra identidad. (Mintz, 2003).

La cocina mexicana es creación mestiza, resultado de la fusión de dos elementos principales: la cultura del maíz –como ingrediente principal en la dieta diaria de la cocina nativa prehispánica- y la elemental cocina española (Celis, 2003).

La base indispensable de esta cocina es la trilogía maíz-chile-frijol considerados el eje singular que representa la identidad cultural y agrupa la diversidad que caracteriza a la nación.Posteriormente la llegada de las culturas ibéricas con la influencia de otras culturas de oriente y del lejano oriente amplió la visión de influencias que, sin embargo, no logró alterar el patrón básico, sí complementarlo y enriquecerlo, que ha dado forma y sentido a esa cocina de consistencia popular a lo largo del tiempo.

España es, pues, la puerta de entrada de alimentos autóctonos de América, que no siempre fueron aceptados de inmediato. Tal es el caso del insustituible tomate que, al principio, solo se usaba como planta de ornato, conocida como "manzana del amor"; o del ahora mundialmente indispensable maíz utilizado únicamente como forraje para las aves domésticas; o el cacao que, transformado en chocolate, fue objeto de reglamentación estricta para su consumo (Celis, 2003). Algunos de estos productos absolutamente mexicanos arraigaron la gastronomía de otras culturas (García, 1965): tomate, chile, vainilla, maíz, chocolate, flor de Nochebuena. Es importante recordar que estos productos son originarios de México, que forman parte de nuestra identidad y que tienen una connotación mundial.

Existen diferentes rasgos que confieren a la comida tradicional mexicana con un carácter único, nacida en un suelo marcado por su generosa biodiversidad y por haber sido cuna de la agricultura que dio origen a las grandes civilizaciones mesoamericanas. La cocina popular mexicana y los rasgos tradicionales que la distinguen, forman parte de ese complejo sistema cultural entrelazado con concepciones cosmogónicas, valores simbólicos y un carácter ceremonial y ritual omnipresentes a lo largo de la vida del individuo y de la comunidad. Nacimiento, bodas, siembras o cosechas y todo hecho que implique momentos trascendentes para la vida colectiva, son ocasiones para una buena comida en compañía de la familia y el grupo (De Maria, 2011). La historia de un pueblo renace diariamente en la cocina, con cada ingrediente utilizado, cada proceso de elaboración o la forma misma de servir el platillo se forja sentido de identidad, se provee una diferenciación simbólica que trasciende a través de las generaciones perpetuando rasgos puros y notables de los pueblos. Es una herencia de conocimientos y prácticas que forman parte del patrimonio cultural intangible, construido y enriquecido a través del tiempo, producto del legado social.

Algunos famosos conocedores de asuntos gastronómicos aseguran que la cocina mexicana se sitúa dentro de las tres más importantes del mundo, junto con la francesa y la China, aunque algunos también incluyan a la Italiana en este nivel (Celis, 2003).De todas las características de la cocina mexicana antes mencionadas, se logra que por primera vez el sistema alimentario de un país acceda al rango de patrimonio cultural de la humanidad. En un hecho sin precedentes el 16 de noviembre de 2010, la cocina tradicional mexicana fue declarada por la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO) patrimonio cultural de la humanidad. El histórico suceso tuvo lugar en Nairobi, Kenia, en el marco de la Quinta Reunión del Comité Intergubernamental para la Salvaguardia del Patrimonio Cultural inmaterial de ese organismo internacional, cuando la cocina mexicana fue inscrita en la lista representativa correspondiente. La UNESCO fundamenta de la siguiente manera su declaratoria:

"La cocina tradicional mexicana es un modelo cultural completo que comprende actividades agrarias, prácticas, rituales, conocimientos antiguos, técnicas culinarias, costumbres y modos de comportamiento comunitarios ancestrales. Esto ha llegado a ser posible gracias a la participación de la colectividad en toda la cadena alimentaria tradicional: desde la siembra y la recolección de las cosechas hasta la preparación culinaria y degustación de los manjares [...] El arte culinario mexicano es muy elaborado y está cargado de símbolos [...] Se pueden encontrar agrupaciones de cocineras y de otras personas practicantes de las tradiciones culinarias [...] Sus conocimientos y técnicas son una expresión de la identidad comunitaria y permiten fortalecer los vínculos sociales y consolidar el sentimiento de identidad en el ámbito nacional, regional y local" (UNESCO, 2010). Por lo que a manera de conclusión, el maíz y sus derivados son ingredientes básicos de la cocina de todos los mexicanos, sin distinciones étnicas, socioculturales o económicas y que es una cocina que predomina tanto en la vida cotidiana como en el calendario ritual, ceremonial y festivo de toda una nación y aún con una fuerte influencia cultural de consumo por los migrantes mexicanos en Estados Unidos.

### Migración

El fenómeno de migración de México a Estados Unidos es de suma importancia, ya que presenta características económicas, políticas y culturales determinantes para ambos países. A continuación se comentará sobre dicha problemática. No hay dos países fronterizos en el mundo en que la migración sea más importante. México es la única nación cuya población emigrante se ha concentrado históricamente, casi en su totalidad, en un solo lugar, Estados Unidos, que es al mismo tiempo el país con el que comparte la frontera más dinámica del mundo. Para la relación bilateral asimétrica y crecientemente interdependiente, se trata del tema más importante, sensible y rezagado.Ninguna otra corriente de inmigración a Estados Unidos ha demostrado el impacto cultural de la mexicana ya que estos migrantes conservan sus vínculos culturales (Arizpe, 2007, pág. 89). Es necesario destacar que el fenómeno migratorio entre México y Estados Unidos se diferencia de otros flujos migratorios por tres factores principales: a) la historicidad, b) la masividad y c) la vecindad (Hernández, 1980).

a) El proceso migratorio mexicano se distingue por ser un proceso que tiene sus raíces a finales del siglo XIX, que se perpetuó y desarrolló de manera constante a lo largo del siglo XX y se proyectó pujante en el siglo XXI.

b) Es un proceso masivo que involucra a millones de individuos y a millones de familias y que se materializa entre países vecinos que comparten más de 3 mil kilómetros de frontera (Durand & Masey, 2003).

c) El proceso de vecindad es inevitable por la cercanía geográfica que presentan ambos países, característica única con respecto a otros casos migratorios. Es necesario mencionar que de esta vecindad se liga al antecedente histórico ya que los estados del Sudoeste norteamericano pertenecieron a México.

Gran parte de los migrantes mexicanos en Estados Unidos mantienen interrelaciones sociales, culturales, económicas y políticas en los dos países. Muchos de ellos son trabajadores temporales que participan en un circuito trasnacional y mantienen abierta, de manera permanente, una puerta de comunicación e intercambio cultural en ambos países.

Sin embargo, a través de estos circuitos binacionales, giratorios y dinámicos se lleva a cabo una interacción constante de ideas, cultura, lenguaje, valores y formas de vida entre los dos países. Cabe señalar que este intercambio genera movimientos en el estilo de vida de los pobladores de ambos lados de la frontera, mismos que han sido estudiados y documentados tanto en Estados Unidos como en México, en sus aspectos sociológicos, demográficos, políticos, económicos, laborales, históricos, antropológicos y, sólo recientemente en sus aspectos mercadológicos.

En la actualidad la migración mexicana se encuentra concentrada principalmente en las ciudades de: Los Ángeles, San Antonio, Houston, Chicago y El Paso entre otras. Es por esta razón que la ciudad de Los Ángeles se tomó como referencia para la investigación, debido a la alta concentración de mexicanos, específicamente ubicados en el Este de esta ciudad donde se concentran actualmente 410,289 migrantes mexicanos (Census Bureau, 2006-2010). En síntesis se considera que la migración es un fenómeno que consiste en el desplazamiento de individuos que tiene lugar desde un lugar de origen hacia otro destino, implicando un cambio de residencia habitual. Y las causas sociales y económicas datan de varias décadas, originadas principalmente por las necesidades de trabajo y del empleo de mano de obra barata de un país poderoso económicamente y otro país emergente, como es el caso de México y Estados Unidos.

# METODOLOGIA

Para abordar la presente investigación se desarrollaron los siguientes puntos: Planteamiento del problema. En México, existen pocos estudios documentales y de campo sobre la influencia del marketing nostálgico en el consumo de productos de maíz en los migrantes mexicanos en Los Ángeles California. Por lo tanto, ¿Qué se requiere para darle solución a la problemática? La respuesta está en determinar la influencia del marketing nostálgico en el consumo de productos de maíz en los migrantes mexicanos en Los Ángeles California. Pregunta general de investigación. ¿Cuál es la influencia que tiene el marketing nostálgico en el consumo de productos de maíz en los migrantes mexicanos en Los Ángeles California. Determinar la influencia del marketing nostálgico en el consumo de productos de maíz en los migrantes mexicanos en Los Ángeles California? Objetivo General. Determinar la influencia del marketing nostálgico en el consumo de productos de maíz en los migrantes mexicanos en Los Ángeles California.

Justificación. La presente investigación contribuirá con información teórica, práctica, social y de conveniencia. Por las siguientes razones: Se aporta una metodología específica y práctica llamada modelo *Nostalgic mix* para determinar la relación de la influencia del marketing nostálgico en el consumo de productos de maíz en los migrantes mexicanos en el Este de Los Ángeles California. Además la investigación se considera original ya que no se han encontrado estudios sobre la relación de estas variables dentro del contexto del marketing nostálgico.

Variables: Las variables que se operacionalizaron para la investigación, fueron: el marketing nostálgico a través de la aplicación del modelo *Nostalgic mix* (producto, precio, plaza y promoción) como variables independientes. Y consumo de productos de maíz como variable dependiente. Hipótesis. La influencia del marketing nostálgico a través de las 4 P's (producto, precio, plaza y promoción) es directamente proporcional en el consumo de productos de maíz en los migrantes mexicanos en Los Ángeles California. A continuación se presenta un resumen técnico del diseño de la metodología empleada. Ver Tabla 1.

Tabla 1: Resumen técnico de la investigación.

Enfoque de la investigación	Cuantitativa
Tipo de investigación	Descriptiva, correlacional y transversal
Unidad de análisis	Migrantes mexicanos mayores de 20 años y menores de 80 años
Método de investigación	Deductivo, analítico y sintético
Técnica de investigación	Encuesta, entrevista y observación dirigida a migrantes mexicanos
Instrumento	Cuestionario, uso de la escala tipo Likert
Estratagia da anliancián	¿A quién?: migrantes mexicanos ¿Cuándo?: Abril del 2012 ¿Dónde?: restaurantes,
Estrategia de aplicación	supermercados, centros comerciales, barrios y otros, en el Este de los Ángeles.
Población objetivo	245 mil migrantes mexicanos entre 20 y 80 años (Census Bureau, 2006-2010).
	383 ajustado a 390 migrantes mexicanos fue el resultado del tamaño de la muestra. Utilizando
Muestra de studio	los criterios de 95% de confiabilidad, 5% de margen de error, 50% de probabilidad a favor y
	50% de probabilidad en contra
Técnicas/pruebas estadísticas utilizadas en	Coeficiente de correlación de producto momento de Pearson, coeficiente de determinación y
al análisis de datos	coeficiente de Alpha de Cronbach.
Programa estadístico utilizado	MINITAB y Excel

En esta tabla se muestra el resumen técnico del diseño de la metodología empleada para la investigación. El enfoque de la investigación fue cualitativo, con un tipo de investigación descriptivo, correlacional y transversal aplicado a migrantes mexicanos entre 20 y 80 años de edad, el método de investigación fue deductivo, analítico y sintético, a través de la encuesta, entrevista y observación como técnica de investigación, apoyandandose en un cuestionario con el uso de escala tipo Likert como instrumento de medición. La encuesta y entrevista fueron aplicadas a una muestra de 390 migrantes en restaurantes, supermercados, barrios y otros sitios en el Este de los Ángeles, California. Se utilizaron como técnicas de análisis de datos: coeficiente de correlación de producto momento de Pearson, coeficiente de determinación y coeficiente de Alpha de Cronbach. Fuente: (Burguete & Acle, 2012).

### **RESULTADOS**

Los resultados de la investigación se exponen a continuación en la Tabla 2.

Tabla 2: Comprobación de hipótesis

Hipótesis	Resultados	Observaciones
H1. Producto determinada por: consumo, atributos del producto, aculturación y nostalgia, es una variable directamente proporcional del consumo de nostalgia de productos de maíz en los migrantes mexicanos en Los Ángeles California	El coeficiente de correlación de producto momento de Pearson (r) fue de 0.763 El coeficiente de determinación fue de 0.582 o 58.2%	La hipótesis sometida a prueba, se considera que aporta evidencia a favor, aplicado en este contexto y una muestra particular de 390 migrantes mexicanos, utilizando las pruebas estadísticas: Coeficiente de correlación de producto momento de Pearson y el coeficiente de determinación
H2. Precio determinada por: poder adquisitivo y elasticidad de la demanda, es una variable directamente proporcional del consumo de nostalgia de productos de maíz en los migrantes mexicanos en Los Ángeles California	El coeficiente de correlación de producto momento de Pearson (r) fue de 0.353 El coeficiente de determinación fue de 0.125 o 12.5%	La hipótesis sometida a prueba, se considera que aporta evidencia en contra, aplicado en este contexto y una muestra particular de 390 migrantes mexicanos, utilizando las pruebas estadísticas: Coeficiente de correlación de producto momento de Pearson y el coeficiente de determinación
H3. Plaza determinada por: disponibilidad de compra y comunicación, es una variable directamente proporcional del consumo de nostalgia de productos de maíz en los migrantes mexicanos en Los Ángeles California	El coeficiente de correlación de producto momento de Pearson (r) fue de 0.643 El coeficiente de determinación fue de 0.413 o 41.3%	La hipótesis sometida a prueba, se considera que aporta evidencia a favor, aplicado en este contexto y una muestra particular de 390 migrantes mexicanos, utilizando las pruebas estadísticas: Coeficiente de correlación de producto momento de Pearson y el coeficiente de determinación
H4. Promoción determinada por: técnicas de promoción de ventas, comunicación y publicidad, es una variable directamente proporcional del consumo de nostalgia de productos de maíz en los migrantes mexicanos en Los Ángeles California	El coeficiente de correlación de producto momento de Pearson (r) fue de 0.740 El coeficiente de determinación fue de 0.548 o 58.4%	La hipótesis sometida a prueba, se considera que aporta evidencia a favor, aplicado en este contexto y una muestra particular de 390 migrantes mexicanos, utilizando las pruebas estadísticas: Coeficiente de correlación de producto momento de Pearson y el coeficiente de determinación

En esta tabla se muestra la comprobación de las hipótesis. La hipótesis H1 Producto cuyos resultados fueron: en el coeficiente de correlación de producto momento de Pearson (r) de 0.763, y el coeficiente de determinación de 0.582 o 58.2%. Esta hipótesis aporta evidencia a favor. La hipótesis H2 Precio cuyos resultados fueron: en el coeficiente de correlación de producto momento de Pearson (r) de 0.353, y el coeficiente de correlación de producto momento de Pearson (r) de 0.353, y el coeficiente de correlación de producto momento de Pearson (r) de 0.353, y el coeficiente de correlación de producto momento de Pearson (r) de 0.453, y el coeficiente de correlación de producto momento de Pearson (r) de 0.453, y el coeficiente de correlación de producto momento de Pearson (r) de 0.643, y el coeficiente de determinación de 0.643. Esta hipótesis aporta evidencia a favor. La hipótesis H4 Promoción cuyos resultados fueron: en el coeficiente de correlación de producto momento de Pearson (r) de 0.740, y el coeficiente de determinación de 0.548 o 58.4%. Esta hipótesis aporta evidencia a favor.

### CONCLUSIONES

El objetivo general de la investigación se logró al determinar que los factores o variables independientes: producto, precio, plaza y promoción, influyen en forma directamente proporcional y positiva en el consumo de productos de maíz por los migrantes mexicanos en Los Ángeles California, excepto la variable precio, que obtuvo una correlación baja de 0.353, cuya relación en este contexto fue diferente al de la teoría pudiendo dar a luz a una nueva teoría.La hipótesis general y las cuatro hipótesis de trabajo que se sometieron a prueba, dan evidencia a favor; excepto la hipótesis de trabajo sobre la variable precio. Sin embargo se refleja la influencia del marketing nostálgico en el consumo de los productos de maíz en un contexto particular.La presente investigación se justifica debido a que aporta información teórica y una metodología específica y práctica llamada modelo *Nostalgic mix* para determinar la relación de la influencia del marketing nostálgico en el consumo de maíz en los migrantes mexicanos en Los Ángeles California.

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# RESUMEN

A pesar de los adelantos teóricos que relacionan la ejecución del presupuesto de recursos humanos con la inversión en activos intangibles (Abeysekera & Guthrie, 2004; Becker, 1993; Gerhart & Becker, 1996) y el gran esfuerzo realizado por construir herramientas que permitan cuantificar el impacto que la participación y gestión de los recursos humanos tienen en el sistema de valor empresarial, pocos son los estudios que presentan evidencia empírica al respecto, en consideración de los diversos mecanismos organizacionales por los cuales se induce la creación de valor (O. García, 2003). El presente trabajo de investigación se enfoca en el área de recursos humanos; se analiza en primer lugar las variables influyentes en la rentabilidad de la inversión en recursos humanos utilizando el concepto de rentabilidad de la inversión en recursos humanos (Fitz-Enz, 2003); posteriormente y mediante un análisis de correlación paramétrica, se determina la relación que tiene la rentabilidad del recurso humano sobre la generación de valor empresarial medido en el flujo de caja. Se concluye que existe una relación directa entre los resultados de los indicadores de valor y la rentabilidad del recurso humano, haciendo necesario identificar las variables organizacionales que articulan el recurso humano y la rentabilidad empresarial.

**PALABRAS CLAVE**: rentabilidad de la inversión en capital humano, Capital humano, Control estratégico, Generación de valor, Calidad del trabajo.

# THE ROLE OF HUMAN CAPITAL IN THE GENERATION OF CORPORATE VALUE

# ABSTRACT

Despite the theoretical advances that relate the human resources budget execution with the investment in intangible assets (Abeysekera & Guthrie, 2004; Becker, 1993; Gerhart & Becker, 1996) and the great effort that was made to build tools that allow quantifying the impact that the participation and human resource management have in the business value system; few are the studies that present empirical advances in consideration of the diverse organizational mechanisms in which the creation of value is induced (O. García, 2003). The present research its focused in the human resource area; in the first place the influential variables on profitability in human resources is analyzed using the return of investment on human resources concept (Fitz-Enz, 2003), and subsequently by a parametric correlation analysis, it is determined the relation that profitability has in relation to the human resource rent on generating business value measured in cash flow. It is concluded that there is a direct relationship between the results of the indicators of value and profitability of human resources, having a necessity to identify the organizational variables that articulate the human resources and business profitability.

**KEY WORDS**: return on investment in human capital, human capital, strategic control, generation of value, work quality.

### INTRODUCCIÓN

La dinámica de los negocios, las demandas y requerimientos de los mercados internacionales y las oportunidades de competitividad, hacen del siglo XXI un espacio temporal enriquecido por las virtudes de la aplicación del conocimiento y el entendimiento de los fenómenos empresariales mundiales. A su vez, la plataforma global brinda al recurso humano incalculables coyunturas y a la vez innumerables exigencias. La gestión organizacional no escapa a las encomiendas de la competitividad en el medio y se convierte en fuente de ventaja estratégica para la efectividad en el logro de los objetivos de desarrollo empresarial. En el presente estudio se discuten las teorías estratégicos, así como el aporte de alternos campos del conocimiento, destacando los análisis y explicaciones económicas y su interrelación con la conducta humana en ambientes organizacionales. Adicionalmente, se incluyen en el debate las posibilidades de generar capital humano y su relación con la creación de valor para las empresas; acudiendo a premisas propias de la economía como la remuneración de los factores de producción o la capacitación y la formación como fuente de riqueza, así como la capacidad de agencia desde la teoría del desarrollo.

Por otra parte, es posible indagar teóricamente en el alcance de las prácticas de gestión humana como en la posibilidad de sus aplicaciones en la empresa. Se reconoce la necesidad de capacidades técnicas para dar lugar a la manifestación del fenómeno del trabajo, sin marginar como factor indispensable la voluntariedad del individuo al decidir en su participación y correspondiente aporte. Así, se referencia y analiza el alcance de corrientes novedosas en la gestión mundial como resulta el caso de la calidad del trabajo y su articulación con la competitividad en el empleo. Llevando el objetivo de la discusión hasta pretender identificar los factores determinantes del compromiso humano como medio efectivo de producción y a su vez de desarrollo personal. Se configuran en un modelo probabilístico aquellas variables necesarias para echar a funcionar un sistema productivo con parámetros vinculados a la voluntad individual de participar y construir valor perceptible por diferentes y diversos grupos de interés.

### La Teoría Del Capital Humano

Los primeros años del presente siglo (XXI), estuvieron acompañados por sucesos que de una forma u otra marcaron un punto de inflexión en cuanto al pensamiento administrativo. La incorporación del fenómeno social en la administración no resulta novedosa a las organizaciones (Ferris, Hochwater, Buckley, Harrell-Cook, & Frink, 1999), al tiempo que es reconocible el valor que representa en la época actual, las diferentes formas en que son gestionadas las empresas. En particular una gestión enmarcada en las expectativas, no sólo de los propietarios, también, comienzan a influenciar las directrices de la dirección empresarial gran diversidad de intereses, dando lugar hoy en el sistema de valor a los tan mencionados grupos de interés. El capital humano se constituye y se manifiesta en los resultados provenientes de un conjuntos de conocimientos, habilidades, actitudes y experiencias de todos y cada uno de los trabajadores y su respectiva capacidad para actualizarlo, adaptarlo, compartirlo y hacerlo cada vez más productivo para la organización (Mathis & Jackson, 2008). Se convierte la empresa en el campo de acción de múltiples ciencias como consecuencia de un reclamo general y particular presentado por aquellos grupos que se ven impactados por las decisiones empresariales. Todo este comportamiento organizacional surge en respuesta a las necesidades de competitividad para representar valor empresarial, en la forma requerida para satisfacer y cumplir con las expectativas de cada uno de los actores involucrados.

Adicionalmente, la interdisciplinariedad en el ámbito organizacional permite a la gestión empresarial soportarse en diferentes posturas, todas ellas provenientes de los conocimientos y avances de diferentes ciencias (Schaper, 2004), se reconoce entonces la organización como un espacio social y en el alcance de sus objetivos un espacio de desarrollo (Sen, 2002). Al mismo tiempo, es de esperar que la intervención de una ciencia, se realice desde diferentes puntos de vista o desde las premisas ofrecidas por diferentes escuelas de pensamiento, la economía en este caso, no escapa a dichas expectativas, y en su participación

ha estado presente en cada fase del proceso evolutivo de la administración, probablemente realizando un papel determinante en la concepción del elemento humano en las empresas (Drucker, 1993). Un momento clave para el desarrollo administrativo, se desprende del instante mismo en que las posturas económicas comienzan a preocuparse por el rol que desempeña el recurso humano en los procesos de valor empresarial (Aradhana & Anuradha, 2005). Es así como en la década de los cincuenta, para cuando se asumía ya el elemento humano como factor de producción, se inicia un pensamiento económico diferente alrededor del concepto de recurso humano. Y fue justamente en 1961 cuando se pronuncia el concepto de capital humano fundamentado en las habilidades y conocimientos de las personas (T. W. Schultz, 1961), adquiriendo a la vez relevancia la discusión académica alrededor de estos fundamentos, en particular en la posibilidad de que sean asumidos como factores de capital y por lo tanto estar sujetos a mecanismos de inversión, en momentos en que ya se hacían evidentes las diferencias en los resultados macroeconómicos a partir de las decisiones de inversión en capital físico, en comparación con aquellas alternativas no convencionales como la educación y la capacitación.

Es posible que la intervención del elemento humano como forma de capital se haya demorado debido a la timidez de los investigadores, en especial los economistas quienes tardaron en explicar la participación de las personas en las cifras de crecimiento. Explicación que después de tres décadas, y luego de contar con una escuela de pensamiento en torno al tema "escuela económica de Chicago", no ha logrado ser consolidada, toda vez que aun resulta en pregunta generalizada, precisamente a quienes están a cargo de la dirección de recursos humanos, "la medida por la que el factor trabajo contribuye en los resultados" (T. W. Schultz, 1961), sin hasta ahora recibir respuestas concretas o al menos satisfactorias. Theodore Schultz no fue para la época el único interesado en el tema; lo que inició con una concepción de enfoque de recursos en la década de los cincuenta (A. Delgado, 2005), se vio continuado con toda una escuela de pensamiento, que dio lugar a toda una teoría del capital humano (Becker, 1993), y que se vio materializada en premio nobel de economía en 1992.

Durante el periodo iniciado en los años setenta, alimentando la discusión y los avances en el tema, también se involucraron Jacob Mincer, Milton Friedman, Sherwin Rosen, bajo el amparo y el respaldo de la Universidad de Chicago, que a pesar de estar cimentada en principios económicos monetaristas y de desregulación de los mercados, sirvió de cuna para esta teoría, la cual se concentra en la defensa que la educación, el entrenamiento y el cuidado de la salud, son finalmente inversiones en capital y posibilidades de riqueza. Los conceptos mencionados con antelación, nos lleva a profundizar teóricamente en el tema, partiendo desde la fundamentación conceptual que da lugar a las diferencias entre gasto e inversión (Benefits & Compensation, 2005), de tal forma que permita dilucidar el recurso humano como forma de capital, aspecto que hace evidente posturas encontradas entre la economía y la disciplina contable, considerando que esta última continua siendo reconocida como aquella que hace posible tomar decisiones de inversión soportándose en información financiera objetiva. Y es precisamente, en el marco teórico financiero donde se define el gasto como "los costes de los bienes y servicios utilizados en el proceso de obtención del ingreso" (Meigs, Williams, Haka, & Bettner, 2000), y es aquí en donde se equiparan los costes de los activos fijos en función de la depreciación, el pago de los servicios públicos, los gastos de alquiler, con los salarios pagados a los trabajadores, en la medida que todos son necesarios para la realización de un negocio. Lo que probablemente escapa al análisis financiero y que trae a colación la teoría económica respecto del recurso humano, tiene que ver con la postura teórica contable que todo aquello que involucre un gasto representa una disminución en el patrimonio del propietario (O. García, 1999), lo que dejaría sin soporte conceptual la inversión en capital humano, asumiendo que bajo ninguna forma, el aporte humano puede materializarse en activo bajo la figura contable.

El anterior supuesto no resulta del todo cierto, teniendo en cuenta que para que se constituya un gasto, se hace necesario cumplir con dos características: la primera requiere que la adquisición implique un pago o una obligación de pago (Urías, 2006), aspecto que no es discutible, considerando que el salario o cualquier otra forma de pago ligada al recurso humano, como: primas, bonificaciones, incentivos,

programas de salud, entrenamientos, ciertamente implican una obligación de pago. Por otra parte, para que sea constituido el gasto, los bienes y servicios deben ser usados, en otras palabras deben ser consumidos, lo que haría del recurso humano un elemento depreciable o agotable, aspecto que en la practicidad empresarial resulta complejo de demostrar, teniendo en cuenta que este postulado, iría en contra del concepto de experiencia a través del aprendizaje organizacional, al tiempo que dejaría sin bases la sostenibilidad de las ventajas competitivas fundadas en la gestión del conocimiento (Garzón & Fisher, 2008). De igual manera, no atendería por completo el concepto contable de coste, en razón a que "este implica necesariamente una salida de valores, desconociendo por completo la obtención como contrapartida de valores adicionales, en función de otro u otros activos, sean estos materiales o inmateriales" (Ribaya, 1999). En otras palabras, el gasto está en función de lo que se consume, diferente de la concepción de inversión la cual no implica consumo, en cambio si un coste, dado que genera un pago y a la vez una adquisición.

# METODOLOGÍA

# <u>Hipótesis</u>

- 1. Existe una relación positiva entre la inversión en capital humano (medida a través del ROICH) y la generación de valor (medida a través el FCL operativo).
- 2. La calidad del trabajo potencia el impacto de la interacción entre los medios de producción (composición orgánica de capital) y el talento humano (composición técnica de capital) como factores influyentes en la inversión en capital humano (medida a través del ROICH).

*Construcción del modelo de regresión:* el modelo clásico de regresión múltiple lineal, especificación y estimación. El modelo de regresión múltiple se utiliza para evaluar la relación existente entre una variable dependiente y varias variables independientes. El modelo se puede expresar como sigue (Greene, 1988), (Canavos, 1988):

$$y_i = f(x_{i1}, x_{i2}, \dots, x_{iK}) + \epsilon_i = \beta_0 + \beta_1 x_{i1} + \beta_1 x_{i2} + \dots + \beta_k x_{ik} + \epsilon_i, \quad (i = 1, \dots, n.)$$

Donde:

y= variable dependiente o explicada x<sub>1</sub>, x2,..., x<sub>K</sub>= variables independientes o explicativas i= indica las n observaciones muéstrales  $\epsilon$ =perturbación aleatoria

Ecuación Formula del modelo de contribución

# $ROI_{CH} = \beta_1 + \beta_2 CT + \beta_3 COK + \beta_4 CTK + \mu_i$

En dónde:  $ROI_{CH} = ROI \ del \ capital \ humano$   $\beta_1 = Constante \ del \ modelo$   $CT = Calidad \ del \ trabajo (Incluye \ las \ siguientes \ variables: Satisfacción \ Laboral,$ Reconocimiento, Equidad, Participación, Seguridad y Confianza) $<math>COK = Composición \ Orgánica \ de \ Capital$   $CTK = Composición \ técnica \ de \ capital.$  $\mu_i = Término \ de \ error$ 

# CONCLUSIÓN

Este aspecto resalta tanto en el análisis teórico, como en la contrastación empírica. Debido a la distribución de la estructura empresarial en Colombia, que como ya se ha venido mencionando, en su mayor porción destaca por ser intensiva en mano de obra, influyendo en el comportamiento de la composición técnica de capital, principalmente incrementando su nivel. Claro está, contemplando las condiciones económicas del país, resulta evidente que dicho comportamiento, en parte se debe al alto nivel de oferta de trabajo no cualificado, y a las condiciones de financiación de las empresas, por las cuales se ve restringido el acceso a las tecnologías que aportan posibilidades de mayor productividad. Una vez realizada una revisión documental y contemplado los antecedentes investigativos en el marco del concepto de calidad del trabajo, es posible evidenciar la existencia de abundante evidencia que relaciona a los componentes de este concepto, en forma separada con la productividad empresarial. Adicionalmente, con el R^2 arrojado por la regresión en el primer modelo, se puede observar que las variables, calidad del trabajo, composición técnica de capital y composición orgánica de capital, en conjunto explican en un 41,43% la variabilidad de la rentabilidad de la inversión en capital humano.

Lo que es importante comprender a la luz de la teoría y a través de los resultados en el presente estudio, tiene que ver con la idea de acumulación y distribución del capital. Tal y como se observa en los resultados de la estimación de la rentabilidad del capital humano, y la dirección de las relaciones en las variables que lo impactan, se infiere que para obtener incrementos significativos en la rentabilidad, es pertinente incrementar la inversión en la porción orgánica de capital (los medios de producción o activos totales) y disminuir respectivamente la porción técnica (los salarios o talento). A mismo tiempo, el análisis requiere mayor profundidad, ya que lo que en realidad representa el resultado obtenido, es que se debe incrementar la porción orgánica, a expensas de la adquisición de tecnología para la producción y en contraste, aumentar las exigencias en la cualificación del personal, lo que va de acuerdo con la postura de composición técnica adoptada en este estudio, conduciendo a menor requerimiento de fuerza de trabajo no cualificado, y por tanto no implica la disminución de los salarios, en su lugar determina la eficiencia y la eficacia de la porción técnica.

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# FACTORES FINANCIEROS Y NO FINANCIEROS COMO DETERMINANTES DE LAS DECISIONES DE INVERSION

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# RESUMEN

En las últimas décadas, la forma de cómo se gestiona el valor para el accionista por parte de las empresas ha cambiado. Esta nueva economía ya no solo considera la creación de riquezas a través de activos físicos o tangibles, tales como planta, maquinaria, infraestructura, inventarios, efectivo, entre otros, sino que han cobrado relevancia los activos o recursos intangibles que posee la empresa.La tarea de los altos directivos en las empresas es tomar decisiones con base en factores financieros y de igual manera gestionar factores no financieros. La imagen de la marca, la participación del mercado, el nivel de satisfacción y fidelización de los clientes, y la calidad de los productos y servicios, constituyen, entre otros, las nuevas fuentes de creación de valor en una empresa, denominados Activos Intangibles.Con base en lo anterior, este trabajo de investigación pretende conocer y analizar cuales son los factores financieros y no financieros que consideran los empresarios de la industria de alimentos del estado de Yucatán al momento de tomar decisiones de investión.

PALABRAS CLAVE: Decisión, inversión, intangibles.

# DETERMINING FACTORS FINANCIAL AND NO FINANCIAL INVESTMENT DECISIONS.

### ABSTRACT

In recent decades, the way about how to manage the shareholder value by companies has changed. This new economy not only considers the creation of wealth through physical or tangible assets such as plant, machinery, infrastructure, inventories, cash, etc., but has become important assets and intangible assets owned by the company. The task of senior managers in companies is to make decisions based on financial factors and likewise manage non-financial factors. The brand image, market share, the level of satisfaction and customer loyalty, and quality of products and services, are, among others, new sources of value creation in a company called Intangible Assets. Based on the above, this research aims to understand and analyze what are the financial and nonfinancial factors that food industry entrepreneurs of Yucatan State consider when making investment decisions.

**KEYWORDS**: Decision, investment, intangible.

# INTRODUCCIÓN

En las últimas décadas, la forma de cómo se gestiona el valor para el accionista por parte de las empresas ha cambiado. Esta nueva economía ya no solo considera la creación de riquezas a través de activos físicos o tangibles, tales como planta, maquinaria, infraestructura, inventarios, efectivo, entre otros, sino que han cobrado relevancia los activos o recursos intangibles que posee la empresa.El recurso humano de una empresa, con sus aportes e ideas, constituye uno de los conductores más significativos en la creación de riqueza en la presente economía global, generando nuevas obligaciones y responsabilidades tanto para los inversionistas como para los ejecutivos corporativos. Así, hoy los inversionistas deben mejorar la forma en que valorizan las empresas donde tienen inversiones en acciones, mientras que los ejecutivos tienen la tarea de reportar a la comunidad financiera esta nueva forma de creación de valor.

El capital intelectual en general, la imagen de la marca, la participación del mercado, el nivel de satisfacción y fidelización de los clientes, y la calidad de los productos y servicios, constituyen, entre otros, las nuevas fuentes de creación de valor en una empresa, denominados Activos Intangibles.Según datos del 2008 por parte de la Secretaria de Desarrollo Industrial y Comercial (SEDEINCO) la industria de alimentos es uno de los sectores más prometedores en el mercado nacional en cuanto a su desarrollo. Las ramas alimenticias de mayor desarrollo en México son: Frutas y legumbres, productos cárnicos, salsas, sopas y preparaciones alimenticias, tequilas y otros aguardientes, cerveza y artículos de confitería.

Según la Secretaria de Fomento Económico (SEFOE) la industria de alimentos, con vista a la globalización, es una de las más importantes en el Estado de Yucatán, debido a su gran impacto en la generación de empleos en áreas rurales y su gran potencial para satisfacer la enorme demanda de los Estados Unidos y el resto del mundo. Importantes y reconocidos productos son hechos en Yucatán, como salsas de chile habanero, concentrado de frutas y condimentos. Estos son importantes y tradicionales productos gourmet con reconocimiento internacional que dan a éstos productos una calidad única en sabor y presentación. Con el objeto de elevar la competividad en esta actividad económica, se considera necesario desarrollar una estrategia financiera integradora simple para la oportuna y eficiente toma de decisiones de inversión privada directa por los directivos financieros. Es decir, es imperioso realizar un análisis de cómo están tomando las decisiones de inversión en un sector clave de la entidad Yucateca, el de alimentos; considerando los modelos de valuación empresarial utilizados en la toma de decisiones de adquisiciones, fusiones y alianzas en las organizaciones. El objetivo general del estudio será determinar los factores financieros (ventas, utilidad de operación, utilidad neta, costos de financiamiento, fiscales, inversiones y no financieros (calidad del management, posicionamiento del mercado, calidad de los productos y servicios y cultura corporativa) de valor empresarial que explican en mayor medida las decisiones de inversión en empresas industriales de alimentos del estado de Yucatán.

# METODOLOGÍA

Al comienzo de este trabajo se utilizó una investigación exploratoria para obtener una impresión más definida de los factores no financieros y de mayor relevancia usados en la realidad mexicana, que ayudarán a la formulación de la encuesta que se suministrará a los distintos tipos de empresas de la industria alimentaria de Yucatán.Previo al diseño del cuestionario, se entrevistó a diez ejecutivos pertenecientes a diferentes empresas de las mencionadas anteriormente.

Estas entrevistas permitieron una mayor comprensión de las preguntas incluidas en el cuestionario suministrado posteriormente, además de permitir efectuar las modificaciones concordantes a la realidad del ámbito empresarial del medio.Para la finalidad de este estudio, se utilizó una investigación concluyente de tipo descriptiva, la que tiene como objetivo principal describir el grado de importancia, asignado por los distintos empresarios objetos del estudio, a los factores financieros y no financieros en sus decisiones de inversión.El tamaño de la población de 97 empresas se determinó con el número total de unidades económicas del sector de industria de alimentos, publicadas por el Directorio Estadístico Nacional de Unidades Económicas (DENUE), Cabe mencionar que las empresas seleccionadas son de más de 30 empleados, dada la necesidad de que exista un área o departamento financiero dentro de esta clasificación. Se realizaron encuestas personales en las empresas seleccionadas a través de un muestreo probabilístico denominado aleatorio simple sin remplazo el cual consiste en que una vez seleccionada una empresa para encuestar, no puede volverse a seleccionar.

Respecto al tamaño de la muestra, su cuantía incide directamente en la disminución del error de estimación y por tanto en la representatividad de los resultados del análisis, por eso es que cuánto más elevado sea el tamaño de la muestra mejor. El tamaño de muestra se calculó a partir del padrón de empresas de alimentos en Yucatán (con una población de 97 empresas), se empleó un nivel de confianza del 95% y un margen de error del 5% por lo que se obtuvo un tamaño de muestra de 76 empresas y finalmente se lograron 52, ya que una de las limitantes fue que dentro del padrón estaban empresas que

habían suspendido sus operaciones y algunas de ellas no quisieron ser participes del estudio por la naturaleza de la información.

# **REVISIÓN LITERARIA**

En la nueva economía, esta era del conocimiento, el término tradicional de activo intangible ha tomado un nuevo significado y se ha entrelazado con otros términos como activos invisibles, gestión del conocimiento, "knowledge management" y, finalmente, el más significativo, el "Capital Intelectual". Stewart (1998) define el capital intelectual como "la suma de todo lo que saben las personas de la compañía que entrega una ventaja competitiva en el mercado.". Edvisson y Malone (1997), de la compañía de seguros sueca Skandia, lo definió como el "conocimiento que se puede convertir en valor".

Según Valenzuela (2003) los indicadores financieros tradicionales tales como flujo de caja, utilidades, retornos sobre activos, etc., son conceptos que se pueden extraer de los estados contables de todas las compañías que lo poseen, sin importar la industria en que se encuentren. Por contraste, el reporte de los activos intangibles tiene como necesidad establecer indicadores no financieros a medida para cada sector, y en algunos casos en el mismo sector los indicadores no financieros varían de firma en firma. Lo anterior hace que la medición de los activos intangibles sea onerosa, y plantea un mayor grado de dificultad en establecer un estándar. Además, si a lo expuesto le sumamos que el reporte de indicadores no financieros es algo nuevo y desafía al reporte tradicional de indicadores financieros , la medición de activos intangibles puede incluso generar rechazo y desconfianza.

Según Kaplan y Norton (2002), una de las razones por la que las empresas utilizan modelos de medición de capital intelectual, es para identificarlo, ya que constituye el "capital oculto", pues como señalan dichos autores, no se puede gestionar aquello que no se puede medir.De igual manera, Kaplan y Norton, propusieron un modelo de gestión empresarial, basado en la estrategia, cuyo funcionamiento exigía la definición de una serie de indicadores que permitieran la toma de decisiones. La idea fundamental que subyace en él, es que sólo puede gestionarse aquello que puede medirse. Este modelo presenta un conjunto equilibrado de indicadores que representan la visión y estrategia de la empresa desde cuatro puntos de vista. La perspectiva financiera, la perspectiva de los clientes, la perspectiva de los procesos internos y la perspectiva del aprendizaje y el crecimiento.

Para Saint-Onge (1996), referenciado por Alama (2008), el capital intelectual tiene tres componentes: *capital humano*, referido a las capacidades de los individuos para proveer soluciones a los clientes; *capital estructural*, que son las capacidades de la organización para satisfacer las necesidades del mercado; este capital, está compuesto a su vez de cuatro elementos: sistemas, estructura, estrategia y cultura. Y finalmente el *capital cliente*, que refleja la penetración, cobertura, lealtad y rentabilidad de los clientes.El modelo de Navegador de Skandia (Edvinsson, 1997) se aplicó a la compañía de seguros Skandia. Su autor, Edvinsson, plantea que en una empresa existe un conjunto de activos intangibles que no estarían reflejados en los estados contables emitidos por las compañías anualmente. Pero sí estarían presentes en las diferencias entre el valor libro de la empresa y el de mercado.Para Edvinsson, el valor de mercado de una compañía está constituido por dos componentes: el "capital financiero" de la compañía y el "capital intelectual". El capital intelectual, a su vez, se divide en capital humano y capital estructural; el primero se refiere a las competencias y habilidades de los empleados de la organización, mientras que el segundo considera a los conocimientos explicitados por la organización.

Según el modelo Intelect (Euroforum, 1998), bajo la dirección del Doctor Eduardo Bueno Campos, dentro de la medición del capital intelectual se establecen tres bloques: capital humano, capital estructural y capital relacional, bloques conformados por elementos, que a su vez pueden ser medidos por una serie de indicadores. "Ernst and Young", empresa de auditoría multinacional, a través de su centro de investigación "Cap Gemini", realizo numerosos estudios relacionados con la importancia que poseen los activos intangibles en las empresas actualmente. Estos estudios, comprendieron la identificación, medición y gestión de los activos intangibles en las empresas modernas. El estudio señala que los

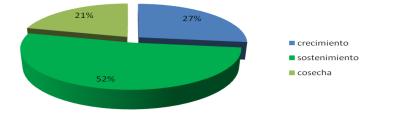
indicadores financieros comúnmente utilizados en las valorizaciones de empresas, tales como el flujo de caja, las utilidades, y ratios de precio / utilidad, siguen siendo medidas financieras importantes, pero que cuentan con un gran defecto en esta nueva economía, este es, que las medidas financieras son solo reflejo de transacciones ya realizadas.

### RESULTADOS

### Perfil De La Empresa.

Un poco más del 50% de las empresas encuestadas se encuentran actualmente en la etapa de sostenimiento, 27% en crecimiento y solo un 21% en etapa de cosecha, estas ultimas, son aquellas empresas que han superado las dos fases anteriores y que no requieren inversiones importantes, sino mas bien incrementar su flujo de efectivo.

Figura 1: Etapas de vida de la industria de alimentos de Yucatán



En esta figura están las tres principales etapas en la vida de una empresa: crecimiento, sostenimiento y cosecha. Fuente: Elaboración propia (2012).

Los tres principales motivos por el cual los empresarios de este sector decidieron invertir en la industria de alimentos en Yucatán son: la experiencia en el sector, la ubicación geográfica del Estado y el mercado potencial previsto. En la siguiente tabla se reflejan las características de los empresarios encuestados:

### Ventas

Las ventas que dijeron registrar las compañías del sector de alimentos en Yucatán durante el año 2010 fueron para poco menos de la mitad por debaio de los \$20,000,000 contrastando con poco más de la tercera parte de éstas con ventas de más de \$100,000,000. Las empresas del sector alimentos venden sus productos en diversos mercados, algunas solo a un mercado, otras a más de uno, en general los resultados indican que el promedio de las ventas que corresponde al mercado municipal es el 54%, al mercado estatal 57%, al mercado nacional 53%, y al mercado extranjero 43%, la mitad de las empresas destina el 45% o menos de sus ventas al mercado municipal, 50% o menos al mercado estatal, 64% o menos al mercado nacional y 25% o menos al mercado extranjero.Poco más de la mitad de las empresas encuestadas (55.8%) afirmaron que el comportamiento en el volumen de sus ventas fue a la alza en el periodo 2008 – 2009 y dijeron que el principal factor que influyo en dicho comportamiento fue la experiencia en el sector seguido de la visualización de un mercado potencial y de la ventaja competitiva. En casi el mismo porcentaje que en el periodo anterior poco más de la mitad de las empresas del sector alimenticio (59.6%) dijeron que el volumen de sus ventas se fue a la alza durante el periodo 2009-2010, las principales razones que dijeron causaron dicho comportamiento fueron en primer lugar la experiencia en el sector seguido de la percepción del mercado potencial y la ventaja competitiva, coincidiendo de igual manera con el periodo anterior.

### Tabla 1: Perfil de los encuestados

	Frecuencia	Frec Acum.	Porcentaje	% acumulado
Sexo				
Masculino	14	14	26.9	26.9
Femenino	38	52	73.1	100.0
Puesto				
Dueño/accionista/Propietario	6	6	11.5	11.5
Administrador /Gerente general	19	25	36,5	48.0
Director finanzas / Contralor	27	52	52.0	100.0
Años en el puesto				
Menos de un año	5	5	9.6	9.6
De uno a tres años	11	16	21.2	30.8
Mas de tres y hasta cinco años	15	31	28.8	59.6
Mas de cinco años	21	52	40.4	100.0
Profesión				
Contador publico	17	17	32.7	32.7
Lic. en administración de empresas	17	17	52.7	02.7
Ingeniero industrial	9	26	17.3	50.0
Alta dirección	7	33	13.5	63.5
Comerciante	2	35	3.8	67.3
Otros	2 5	40	9.6	76.9
Edad	12	52	23.1	100.0
Mas de 59 años		02	20.1	100.0
De 53 a 59 años	2	2	3.8	3.8
De 46 a 52 años	2	4	3.8	7.6
De 39 a 45 años	2 2 5	9	9.6	17.2
De 32 a 38 años	16	25	30.8	48.0
De 25 a 31 años	12	37	23.1	71.1
	15	52	28.9	100.0

En esta taba se refleja el perfil de los encuestados. Fuente: Elaboración propia con software estadístico SPSS versión 17.0 (2011)

### Tabla 2: Comportamiento del volumen de las ventas del periodo 2008 - 2009

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	A la alza	29	55.8	58.0	58.0
	Se mantuvo igual	15	28.8	30.0	88.0
	A la baja	6	11.5	12.0	100.
Perdidos Total	Total Sistema	50 2 52	96.2 3.8 100.0	100.	0

En esta tabla se refleja el comportamiento de las ventas de las empresas encuestadas para saber si hubo incremento, decremento o se mantuvieron sin cambios en el periodo 2008-2009. Fuente: Elaboración propia con software estadístico SPSS versión 17.0 (2011)

Tabla 3: Comportamiento del volumen de las ventas del periodo 2009 - 2010

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	A la alza	31	59.6	59.6	59.6
	Se mantuvo igual	14	26.9	26.9	86.5
	A la baja	7	13.5	13.5	100.
Perdidos Total	Total Sistema	50 2 52	96.2 3.8 100.0	100.	0

En esta tabla se refleja el comportamiento de las ventas de las empresas encuestadas para saber si hubo incremento, decremento o se mantuvieron sin cambios en el periodo 2009-2010. Fuente: Elaboración propia con software estadístico SPSS versión 17.0 (2011)

Más de la mitad de las compañías objeto de este estudio dijeron no haber realizado ventas de exportación en lo que va de este año para expandir su demanda y la tercera parte que si lo ha hecho. El principal país donde se exporta es Estados Unidos, los otros dos principales destinos son Cuba y países sudamericanos como Guatemala, Salvador y Brasil.

# Figura 2: Número de empresas que han realizado exportaciones de productos



En esta figura se refleja el porcentaje de empresas que realiza exportación de sus productos y las que solo venden en el mercado nacional. Fuente: Elaboración propia (2012).

### Utilidad de operación.

El comportamiento de la utilidad de operación para el periodo 2008-2009 se mantuvo igual para menos de la mitad de las empresas (42%) y fue a la alza para casi la mitad de estas (46%), los factores que mencionaron fueron los que repercutieron en dicho comportamiento son: aumento en ventas paralelamente con disminución en ventas, eficiencia en el área de producción, eficiencia organizativa y aumento en costos de administración y venta.

Tabla 4: Comportamiento	de la utilidad de	operación del	periodo 2008 – 2009
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		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	A la alza	23	44.2	46.0	46.0
	Se mantuvo igual	21	40.4	42.0	88.0
	A la baja	6	11.5	12.0	100.
	Total	50	96.2	100.	0
Perdidos	Sistema	2	3.8		
Total		52	100.0		

En esta tabla se refleja el comportamiento de la utilidad de operación de las empresas encuestadas para saber si hubo incremento, decremento o se mantuvieron sin cambios en el periodo 2008-2009. Fuente: Elaboración propia con software estadístico SPSS versión 17.0 (2011).

Para casi la mitad de los encuestados el comportamiento de la utilidad de operación se fue a la alza y para poco más de un tercio se mantuvo igual ambos en el periodo 2009-2010, los principales factores que repercutieron en el comportamiento a la alza fueron según ellos: el aumento en ventas, eficiencia en el área de producción, disminución en costos de administración y ventas.

Tabla 5: Comportamiento de la utilidad de operación del periodo 2009 – 2010.

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	A la alza	25	48.1	48.1	48.1
	Se mantuvo igual	19	36.5	36.5	84.6
	A la baja	8	15.4	15.4	100.
	Total	52	100.0	100.	0
Perdidos	Sistema	0	0.0		
Total		52	100.0		

En esta tabla se refleja el comportamiento de la utilidad de operación de las empresas encuestadas para saber si hubo incremento, decremento o se mantuvieron sin cambios en el periodo 2009-2010. Fuente: Elaboración propia con software estadístico SPSS versión 17.0 (2011).

### Utilidad neta.

Mediante la determinación de la utilidad neta y de la identificación de sus componentes, se mide el resultado de los logros (ingresos) y de los esfuerzos (costos y gastos) por una entidad durante un período determinado. Al igual que la utilidad de operación se refleja en el estado de resultados y es información confidencial por lo que las preguntas fueron de igual manera cualitativas para conocer la tendencia que reflejan en las empresas encuestadas. El comportamiento de la utilidad neta en el periodo 2008-2009 contrastó en poco menos de la mitad de las compañías ya que para algunas fue a la alza y para otras se mantuvo igual, los principales factores que repercutieron en la alza fueron: la disminución de intereses y costos financieros, disminución de costos fiscales en contra parte con aumento de costos de producción y venta y utilidad por venta de activos fijos como causantes de que se haya mantenido igual.

Tabla 6: Comportamiento de la utilidad neta del periodo 2008 – 2009.

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	A la alza	21	40.4	42.0	42.0
	Se mantuvo igual	20	38.5	40.0	82.0
	A la baja	9	17.3	18.0	100.
Perdidos Total	Total Sistema	50 2 52	96.2 0.0 100.0	100.	0

En esta tabla se refleja el comportamiento de la utilidad neta de las empresas encuestadas para saber si hubo incremento, decremento o se mantuvieron sin cambios en el periodo 2008-2009. Fuente: Elaboración propia con software estadístico SPSS versión 17.0 (2011).

El comportamiento de la utilidad neta para el periodo 2009-2010 fue de poco menos de la mitad de las empresas encuestadas del sector alimentos se mantuvo a la alza y para la tercera parte de estas se mantuvo igual, los factores principales que dijeron repercutieron en esta situación fueron: disminución de intereses y costos financieros, disminución de costos fiscales, aumento de costos de producción y utilidad por venta de activos fijos.

Tabla 74: Comportamiento de la utilidad neta del periodo 2009 – 2010.

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	A la alza	25	48.1	48.1	48.1
	Se mantuvo igual	17	32.7	32.7	80.8
	A la baja	10	19.2	19.2	100.
	Total	52	100.0	100.	0
Perdidos	Sistema	0	0.0		
Total		52	100.0		

En esta tabla se refleja el comportamiento de la utilidad neta de las empresas encuestadas para saber si hubo incremento, decremento o se mantuvieron sin cambios en el periodo 2009-2010. Fuente: Elaboración propia con software estadístico SPSS versión 17.0 (2011).

### Estructura financiera.

El porcentaje promedio que representa el activo circulante del activo total en estas compañías es del 45%, para la mitad de los encuestados el porcentaje es del 40% o menos, el porcentaje mínimo que mencionaron fue del 15% y el máximo del 95%. De igual manera el porcentaje promedio que representa el activo fijo del activo total en estas compañías es del 55%, para la mitad de los encuestados el porcentaje es del 60% o menos, el porcentaje mínimo que mencionaron fue del 5% y el máximo del 85%.

Fuentes y costos de financiamiento.

La principal fuente de financiamiento utilizada en el periodo 2008-2010 por la mitad de las empresas fueron los proveedores seguida de bancos comerciales y nuevas aportaciones de socios. El principal destino de los recursos fue el capital de trabajo para poco más de la mitad de las compañías. La estructura financiera durante el periodo estudiado respecto del activo total en términos porcentuales para Deuda Bancaria pasivo con costo financiero fue en promedio del 37% y para Capital Contable del 63%, y la mitad de las empresas reportaron que el porcentaje para Deuda Bancaria en el mismo periodo fue de 35.5% o menos; así mismo la mitad de las compañías mencionó que para Capital Contable fue de 64.5% o menos, en ambos casos el porcentaje mínimo fue de 0% y el máximo del 100%. La tasa de interés bancaria anual que en promedio pagaron por los créditos durante el periodo 2008-2010 fue del 40% sin embargo la mitad de las empresas dijo haber pagado 14.6% o menos para el mismo periodo.La tasa de rendimiento anual promedio exigida por los accionistas fue del 15% y la mitad de las compañías mencionó que fue del mismo periodo.

*Costos fiscales:* La tasa promedio de impuesto federal que se pagó por la muestra de empresas estudiada fue del 24%, la mitad pagó el 23% o menos siendo la tasa mínima que se pagó del 2.5% y la tasa máxima del 64%. Por otra parte la tasa promedio de impuesto estatal que pagaron las empresas fue de 2.7% la mitad de estas pagó 2.2% o menos y la tasa mínima a este impuesto que dijeron pagar fue del 0% y la máxima del 15%.

*Inversiones directas:* Poco más de la mitad de las empresas dijeron que el comportamiento de las inversiones directas o activos totales en el periodo estudiado fue a la alza y muy pocas reportaron que el comportamiento haya sido a la baja; estas últimas dijeron que la principal razón por la cual consideran el comportamiento de las inversiones directas haya disminuido fue: falta de recursos financieros para invertir en activos.

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	A la alza	27	51.9	48.1	51.6
	Se mantuvo igual	20	38.5	32.7	90.4
	A la baja	05	9.6	19.2	100.
	Total	52	100.0	100.	0
Perdidos	Sistema	0	0.0		
Total		52	100.0		

Tabla 8: Comportamiento de las inversiones directas del periodo 2008 – 2010

En esta tabla se refleja el comportamiento de las inversiones directas de las empresas encuestadas para saber si hubo incremento, decremento o se mantuvieron sin cambios en el periodo 2008-2010. Fuente: Elaboración propia con software estadístico SPSS versión 17.0 (2011).

Las empresas que mencionaron que el comportamiento de las inversiones directas fue a la alza lo aplicaron en los siguientes rubros tres o más veces en el periodo: Actualización del Equipo de Producción, Actualización tecnológica, Innovación de Productos, Investigación y Desarrollo, Capital de Trabajo, Capacitación del Recurso Humano del Área de Producción y Capacitación del Recurso Humano del Área Directiva. La aplicación una vez en el periodo fue en el siguiente rubro: Nuevos Proyectos de Inversión.Ninguna vez se aplicó en el periodo en los siguientes rubros: Adquisición de terrenos y edificios, Instalación de nuevas sucursales, Adquisición de otras empresas, Fusión con otras empresas y Alianzas Estratégicas con otras Empresas.

### Factores NO financieros.

Para poco más de la tercera parte de las compañías en el sector alimentos en Yucatán el principal factor no financiero que consideran cuando evalúan una potencial decisión de inversión directa es la calidad de los productos y servicios, por encima de la participación en el mercado, cultura corporativa y calidad del management. Por otra parte más de la cuarta parte de los encuestados dijeron que le asignan un porcentaje de ponderación de entre 20 y 39 por ciento a los factores no financieros durante el proceso de toma de decisiones.

 Tabla 9: Rango de porcentaje de ponderación que le asignan las empresas encuestadas a los factores No

 financieros durante la toma de decisiones de inversión

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	Del 0% al 19%	04	7.7**	7.7	7.7
	Del 20% al 39%	15	28.8**	28.8	36.5
	Del 40% al 59%	08	15.4**	15.4	51.9
	Del 60\$ al 79%	13	25.0**	25.0	76.9
	Del 80% al 100%	12	23.1**	23.1	12
	Total	52	100.0**	100	100

\*\*En esta tabla se refleja la ponderación obtenida acerca de la toma de decisiones con base en factores no financieros. Fuente: Elaboración propia con software estadístico SPSS versión 18.0 (2011)

El comportamiento de las ventas es un factor financiero muy importante para los empresarios al momento de resolver una potencial decisión de inversión. En la siguiente tabla podemos observar como las ventas son lo más importante, seguido de la utilidad de operación, los costos fiscales, la estructura financiera y los costos de financiamiento.

Tabla 105: Grado de importancia que los inversionistas otorgan a los factores financieros

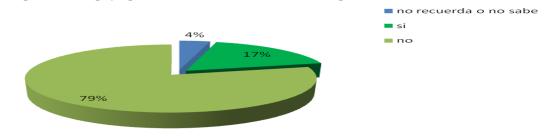
Factores	Nada	Poco	Medianamente	Importante	Muy
Financieros	importante	importante	importante		importante
Comportamiento de las ventas	0%	0%	0%	15.40%	84.60%
Utilidad de operación	0%	1.90%	0%	53.80%	44.30%
Estructura financiera	0%	9.60%	9.60%	55.80%	25%
Costos de financiamiento	0%	9.60%	13.50%	51.90%	25%
Costos físcales	0%	11.50%	19.20%	53.80%	15.50%

En esta tabla se refleja de manera ordinal la importancia asignada por los empresarios de la industria alimentaria a los factores financieros. Fuente: Elaboración propia con software estadístico SPSS versión 18.0 (2011)

En cuanto a los factores no financieros los directivos jerarquizaron la calidad de los productos y servicios como muy importante, seguido de la participación en el mercado, la calidad del management y por último la cultura corporativa de la organización.

### Apoyos gubernamentales.

Más de las tres cuartas partes de las empresas encuestadas no obtuvieron apoyos orientados al fomento de la inversión en el periodo estudiado, las muy pocas empresas que dijeron haber recibido algún apoyo lo obtuvieron de la Secretaria de Agricultura; Ganadería, Desarrollo Rural, Pesca y Alimentación (SAGARPA) y les sirvió principalmente para capacitación, asistencia técnica y consultoría empresarial.



### Figura 3: Empresas con apoyo para el fomento a la inversión en el periodo 2008-2010

En esta figura se refleja el comportamiento de los apoyos gubernamentales en la industria alimentaria de Yucatán por parte del gobierno estatal y federal. Fuente: Elaboración propia (2012).

Así mismo en lo que va del año la mayoría de las compañías no han solicitado apoyos gubernamentales principalmente por falta de promoción y desconocimiento, y las muy pocas que lo han solicitado lo han recibido de SAGARPA y su destino principal fue para apoyar en infraestructura. Las tres principales causas que se mencionaron contribuyeron a no solicitar apoyo a instancias gubernamentales fueron la falta de conocimiento y promoción de estos apoyos, trámites burocráticos y la no necesidad por contar con liquidez y por obtener recursos a través de sus corporativos.

### Administración De Riesgos.

De acuerdo al diccionario de la Real Academia Española, "riesgo" significa "contingencia o proximidad de un daño". El riesgo de un negocio es la probabilidad de que una amenaza pueda afectar la capacidad de una organización para lograr sus estrategias y objetivos. Visto desde un contexto global, toda actividad empresarial, sin importar su tipo, se propone alcanzar uno o varios objetivos y/o fines, aunque todas enfrentan también el riesgo de no lograrlos o no alcanzarlos en la medida esperada. Ese riesgo general involucra riesgos de diferentes tipos a los que están expuestos, a través de las operaciones que realiza cualquier entidad, los recursos que se invierten para llevarlas a cabo.

Es responsabilidad de los directivos que tienen a su cargo la administración y operación de la empresa o entidad, el identificar los riesgos y establecer los controles internos necesarios para prevenirlos, detectarlos y corregirlos. La función de auditoría interna constituye una actividad de control que establece la administración de una entidad con el objeto de verificar que los demás controles internos establecidos por la misma, funcionen correcta y oportunamente Los empresarios objeto de este estudio manifestaron que los tres principales aspectos que consideran que contribuyen a la problemática interior de sus empresas en cuanto a Administración de las empresas del sector alimenticio adquieren primas de seguros al menos una vez al año, cuentan con programas de certificación, hacen dictamen de estados financieros, realizan auditoría interna al menos una vez al mes, invierten en programas de capacitación y de actualización tecnológica. Cerca de la mitad hacen dictamen voluntario del IMSS y no invierten en fondo de pensiones, la mayoría no cuenta con coberturas de tipo de cambio, tasa de interés, ni cuentan con un plan de recuperación de sistemas así como con futuro de insumos.

### Maximización Del Valor De La Inversión (MVT).

La Maximización del Valor de la Inversión tiene un promedio en el conjunto de estas empresas de -1.33%, el valor mínimo es de -86.24% y el valor máximo es de 79%. Con estos resultados podemos darnos cuenta de que un alto porcentaje de las empresas objeto de la muestra esta con un MVI prácticamente en punto de equilibrio, es decir, no existe una representatividad significativa en este concepto. Es por ello que el comportamiento de las inversiones de este sector no están en función del MVI, es decir, no están relacionados y ello se valida en la hipótesis 02. La tasa de rendimiento operativo anual de los negocios de alimentos es menor o igual al 30% como lo muestra la siguiente prueba estadística al 95% de confianza.

## CONCLUSIÓN

La principal inferencia de este estudio es que los aspectos no financieros sí son considerados por los empresarios encuestados al evaluar potenciales inversiones. De hecho, un 48.48% del total de los encuestados, sostiene que estos factores representan entre un 41 y un 60 por ciento de sus decisiones de inversión y, sorprendentemente, un 27.27% manifestó que los aspectos no financieros constituyen entre un 81% y 100% de importancia al momento de evaluar una posible toma de decisión para inversión.

Dentro de los factores no financieros más importantes destaca: la experiencia del management, la ejecución de la estrategia corporativa y la calidad de la estrategia corporativa, todas ellas forman parte de la dimensión de calidad del management. En el caso de los factores financieros tradicionales, como las ventas y la liquidez, fueron sorpresivamente desplazados por los tres aspectos mencionados anteriormente, pero no en forma significativa. Todo esto demuestra que los factores que no aparecen reportados en los estados contables, tienen una mayor relevancia para las decisiones de inversión de los encuestados y, que los factores financieros siguen considerados significativamente.

El hecho de que la experiencia del management haya sido el factor más importante en este estudio, justifica la relevancia que han adquirido en las empresas los métodos de gestión de activos intangibles, como el cuadro de mando integral (balance scorecard). Este factor también aparece en el primer lugar de los estudios extranjeros analizados al documentarnos sobre este tema.La regulación, cumplimiento de normas ambientales, la investigación y desarrollo, junto con la habilidad de atraer y retener a personas talentosas, fueron los factores no financieros con la menor importancia entre los encuestados. Esto se debe en parte a la poca inversión en I + D que se realiza en nuestro país.

Se están considerando más importantes los factores no financieros que los tradicionales, pero no hay un reporte formal y establecido en los estados contables.Para un mejor desempeño financiero, las empresas deben considerar estas nuevas fuentes de valor, gestionarlas e incorporarlas en los reportes que emiten. De no efectuarse lo anterior, significaría no proporcionar la información correcta que demandan los inversores, que podría generar opiniones erradas y distorsionadas sobre el verdadero valor de la compañía.

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# BIOGRAFIA

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# BIOETICA: UNA ORIENTACION HACIA LA RESPONSABILIDAD SOCIAL EMPRESARIAL DE LOS ESTUDIANTES LATINOAMERICANOS DE ESCUELAS DE NEGOCIOS

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# RESUMEN

El objetivo principal de este estudio es validar el instrumento de medición desarrollado en López-Paláu y Rivera Cruz (2010) en Latinoamérica. Dicho estudio encontró que el razonamiento bioético puede aportar en el entendimiento y solución de muchos conflictos éticos en el ámbito de los negocios. La relación entre la responsabilidad social empresarial y el razonamiento bioético se examinó utilizando como marco conceptual el modelo multidimensional de las empresas propuesto por Carroll (1979) y los principios bioéticos propuestos por Beauchamp y Childress (1979). El estudiodesarrolló una escala cuantitativa confiable para ambos constructos partiendo de una muestra de estudiantes puertorriqueños, la cual necesita ser examinada en otros contextos para verificar su validez y utilidad en el ámbito internacional. Los resultados obtenidos determinaron los principales principios bioéticos e identificaron las características que deben tener las empresas para ser consideradas exitosas, socialmente responsables y el efecto de los principios bioéticos para lograrlo.

PALABRAS CLAVES: Bioética, Responsabilidad Social Empresarial, Género.

# BIOETHICS: A GUIDE TO SOCIAL RESPONSIBILITY OF STUDENTS AMERICAN BUSINESS SCHOOL

# ABSTRACT

The main objective of this study is to validate the measuring instrument developed in Palau and Rivera Lopez-Cruz (2010) in Latin America. That study found that bioethical reasoning can contribute towards understanding and solving many ethical conflicts in the field of business. The relationship between corporate social responsibility and bioethical reasoning was examined using as a framework the multidimensional model proposed by Carroll companies (1979) and the bioethical principles proposed by Beauchamp and Childress (1979). The study developed a quantitative scale reliable for both constructs from a sample of Puerto Rican students, which needs to be examined in other contexts to verify its validity and usefulness in the international arena. The results identified major bioethical principles and identified the characteristics that companies must have to be considered successful, socially responsible and the effect of bioethical principles to achieve it.

**KEYWORDS:** Bioethics, Corporate Social Responsibility, Gender.

### INTRODUCCION

Aunque las investigaciones sobre la ética en el área de los negocios han ido avanzando con el tiempo, todavía sigue habiendo la necesidad de desarrollar modelos teóricos capaces de explicar y predecir el comportamiento ético/no ético de los individuos, así como también la creación de instrumentos de medición cuantitativos confiables para dicho fin, teniendo en cuenta el contexto cultural. La complejidad de los conflictos éticos de la actualidad requiere que sean abordados desde una perspectiva interdisciplinaria para su posible solución. Los estudiantes de las escuelas de negocio necesitan herramientas nuevas y relevantes que les permitan afrontar los diversos conflictos éticos con los que se enfrentarán en su carrera profesional.

López Paláu y Rivera Cruz (2010) identificó un espacio común a nivel teórico entre la responsabilidad social empresarial y la bioética. Ello sugiere que la inclusión de la bioética podría enriquecer el currículo de las escuelas de negocio añadiendo una herramienta adicional para desarrollar la orientación hacia la responsabilidad social empresarial de los estudiantes y aportar en el entendimiento y solución de muchos conflictos éticos en el ámbito de los negocios. Los resultados del estudio, con una muestra de estudiantes puertorriqueños, sugieren que los futuros directivos de empresas no están comprometidos ni con las metas económicas de la organización ni con utilizar los recursos de la empresa para responder a las necesidades diversos actores sociales. Esto implica un gran reto para las escuelas de negocios donde se supone que se formen para ejercer sus profesiones. Parece ser que la exposición de los estudiantes al tema de la responsabilidad social empresarial esta siendo efectiva en la transmisión de conceptos teóricos, pero no así en la formación de valores personales lo suficientemente arraigados como para contrarrestar valores corporativos contrarios. Este estudio, al igual que el previo, utilizará como marco conceptual el modelo multidimensional de las empresas propuesto por Carroll (1979) y los principios bioéticos propuestos por Beauchamp y Childress (1979). Aunque el estudio anterior adelantó un paso al crear un instrumento de medición confiable para determinar la orientación hacia la responsabilidad social empresarial y el razonamiento bioético de los estudiantes de administración de empresas, el mismo debe ponerse a prueba en otros contextos para determinar su validez y utilidad en ambientes multiculturales.

### **Objetivos**

En esa dirección, este estudio pretende examinar si la relación entre la responsabilidad social empresarial y el razonamiento bioético encontrada en el estudio de estudiantes puertorriqueños se sostiene en el contexto latinoamericano. Los objetivos específicos son:

- 1. Validar el instrumento de medición desarrollado por López Paláu y Rivera Cruz (2010)en Latinoamérica.
- 2. Determinar la importancia de los principios bioéticos en la definición de lo que constituye una empresa
- 3. Determinar la validez de las cuatro dimensiones del modelo de Carroll (1979) y su importancia relativa.
- 4. Calcular índices para medir la orientación hacia la responsabilidad social empresarial y cada una de las cuatro dimensiones teóricas.
- 5. Calcular índices de razonamiento bioético y determinar su efecto en los índices de las cuatro dimensiones de la empresa.

6. Determinar las características que deben tener las empresas para ser consideradas exitosas, socialmente responsables y el efecto de los principios bioéticos para lograrlo.

### Marco Teorico

Van Rensselaer Potter utilizó el término por primera vez en 1970 en un artículo y en el 1971 publica el libro Bioética: Puente hacia el futuro en el cual se recogen varios de sus artículos. Desde entonces, muchos estudiosos han aportado nuevas concepciones, métodos y justificaciones (Santos y Vargas, 2006). No hay consenso en cuanto al dominio apropiado para la aplicación de la ética en temas biológicos. Algunos autores lo reducen a lo relacionado con el tratamiento médico y los avances tecnológicos, mientras que otros le otorgan un sentido más amplio incluyendo todo aquello que afecte a los organismos. El criterio ético fundamental que regula esta disciplina es el respeto al ser humano y su dignidad.

A pesar de que la responsabilidad social empresarial ha generado una extensa bibliografía en los círculos empresariales y académicos en los últimos años, sigue habiendo mucha confusión conceptual y terminológica. La RSE se ha convertido, en una especie de sombrilla gigante en el que tienen cabida multiplicidad de conceptos y estrategias. No obstante, más allá de la cuestión terminológica y de las diversas teorizaciones que van asociadas a la RSE, todas las partes coinciden en que es un nuevo paradigma de comportamiento de las grandes corporaciones, resultado de una adaptación empresarial a los cambios sociales surgidos en el marco de la globalización económica (Ramiro y Pulido,2009).

Con esta nueva perspectiva, se pretende cambiar el esquema tradicional del negocio orientado exclusivamente hacia la maximización del valor de la empresa y dirigido únicamente a los accionistas (shareholders), por un modelo que toma en consideración a otras partes de la sociedad. La visión centrada en los accionistas plantea que la función de las empresas es proporcionar bienes y servicios que lleven a la maximización de los beneficios a corto plazo y no reconoce ninguna responsabilidad social más allá de la obligación de maximizar el valor para el accionista (Friedman, 1970; Heath y Norman, 2004). En contraste, la teoría de los grupos de interés (stakeholders) plantea que las empresas no pueden ignorar el contexto en el que operan puesto que están interconectadas a una red de relaciones con un gran número de individuos e instituciones denominadas grupos de interés o stakeholders (Freeman, 1984; Donaldson y Preston, 1995; Clarkson, 1995). Se rechaza la idea de que una corporación sólo es responsable ante sus accionistas argumentando que los intereses de otros grupos son también validos y merecen ser atendidos

### RESULTADOS

### Composición de la muestra

La muestra total consistió de 536 estudiantes, de los cuales el 56% es de la carrera de contaduría y el 44% restante del área administrativa. Poco más de la mitad son hombres (52%), mayoritariamente (71%) de nivel subgraduado y menor de 25 años (52%).

### Índice de orientación hacia la responsabilidad empresarial

Los coeficientes de confiabilidad de este índice resultaron en valores entre 73 y 88. Esto refleja una confiabilidad aceptable para un estudio exploratorio, y la mayoría de ellos exceden el límite de .70 generalmente aceptado y defendido por Nunally and Bernstein (1994) como el mínimo deseable. El coeficiente de la dimensión económica resultó originalmente en 0.749, pero aumentaba a 0.751 si se eliminaba la premisa de maximizar la ganancia de los accionistas. De igual manera en la dimensión ética el coeficiente original fue de 0.732, pero aumentaba a 0.765 si se eliminaba la premisa de operar de

forma ética sin sacrificar las metas económicas lo que en efecto se hizo de los análisis subsiguientes. Ninguno de los otros coeficientes mejoraba significativamente con la eliminación de alguna premisa.

### Tabla I : Dimensiones Teóricas de las Empresas

Dimensión económica	84.28**	Estándar 14.71	Cronbach 0.749**
Operar eficientemente	90.89	16.27	
Ser competitivas	88.93	18.06	
Producir riqueza	83.12	21.80	
Ser lucrativas	80.19	23.30	
Maximizar ganancia de los accionistas	78.15	23.69	
Dimensión legal	87.05**	14.14	0.802**
Cumplir con los contratos contraídos	88.57	18.33	
Cumplir con las leyes ambientales	88.35	20.84	
Contratar y compensar al personal según ley	88.30	19.04	
Producir bienes/servicios según estándares	87.72	18.14	
Pagar impuestos según ley	86.65	20.94	
	80.03	20.94	
Acatar las leyes regulatorias	82.71	22.14	
Dimensión ética	82.95**	15.94	0.732**
Actuar de acuerdo a las normas éticas	86.25	19.77	
Ser reconocida como una empresa ética	86.20	21.09	
Fomentar conductas éticas	85.16	21.48	
Operar de forma ética sin sacrificar	50.10	26.06	
metas económicas Operar de forma ética aunque se tengan	79.13	26.86	
que sacrificar las metas económicas	78.00	24.77	
Dimensión de libre discreción	78.80**	17.53	0.791**
Ser reconocida como una empresa			
socialmente responsable	87.58	19.15	
Mejorar la calidad de vida de la sociedad	82.38	22.01	
Mejorar la calidad de vida de su comunidad			
Circundante	80.51	23.16	
Ayudar a resolver problemas sociales	77.72	23.70	
Destinar parte de las ganancias a actividad			
Benéficas	65.83	29.57	
Dimensión de Razonamiento Bioético General	81.32**	17.72	0.752**
Actuar de forma justa en sus operaciones	89.06	18.80	
Evitar que sus operaciones causen cualquier			
tipo de daño a otros	85.92	21.04	
Establecer relaciones con entidades	00.72		
Basadas en respeto mutuo	78.02	25.61	
Beneficiar con sus operaciones a diversos	10.02	20.01	
Grupos	72.10	27.16	
	15.93	0.7	

\*\*Se presenta el promedio obtenido en las premisas que se utilizaron para definir las dimensiones de la empresa, según el modelo de Carroll (1979) y el razonamiento bioético. Se presentan, además, los coeficientes Chronbach's Alpha de cada una de las dimensiones teóricas.

Los promedios más altos se obtuvieron mayoritariamente en la dimensión económica y legal; esto implica que los participantes le otorgan mucha importancia al cumplimiento de la ley siempre y cuando se logren las metas económicas. Los participantes le otorgaron menos importancia a la dimensión de libre discreción (79%) y a la ética (83%). No obstante, es importante notar que los promedios de todas las dimensiones, el de la dimensión de razonamiento bioético y el índice de orientación hacia la responsabilidad social empresarial prácticamente igualan y sobrepasan el 80% de importancia. Este hallazgo es indicativo de que los participantes entienden que las empresas son organizaciones con múltiples funciones, todas importantes, y no un mero ente económico.

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### Análisis factorial

Antes de proceder al análisis factorial se determinó la adecuacidad del procedimiento mediante las pruebas Kaiser-Myer-Olkin y Bartlett's Test of Sphericity. La primera prueba arrojó un resultado de .924 y la segunda resultó con un nivel de significancia de .000, por lo que se concluyó que la muestra es muy adecuada para realizar el procedimiento. Se estableció el valor de .50 para incluir un elemento en un factor y un eigenvalue de 1.00 para retener el factor. Todos los coeficientes resultaron estar asociados significativamente a un solo factor y todos los factores tienen eigenvalues mayores de uno.

El procedimiento resultó en una solución de 5 factores, ligeramente diferente a los cinco identificados teóricamente. Los factores explican casi un 61% del fenómeno, lo cual es muy bueno en este tipo de estudios. Los coeficientes de confiabilidad de cada factor fluctuaron entre .73 y .88 los cuales reflejan una gran confiabilidad. El primer factor está compuesto por la mayoría de las premisas de la dimensión legal, dos bioéticas y dos éticas, y explica casi un 37% del fenómeno. Esto implica que los participantes reconocen la función legal de las empresas como una dimensión separada y, además, la más importante. Las premisas bioéticas incluidas en este factor le añaden mayor sentido a la dimensión legal, ya que se puede constatar que existe una relación entre ambos grupos lo que permite identificarlas como empresas apegadas a la legalidad y con sentido ético.

El segundo factor es el más hibrido. Incluye tres premisas sociales, dos éticas, dos legales y una económica. Parecería que los participantes visualizan la mejora en la solución de los problemas sociales a través del cumplimiento de las leyes, así como el ser percibida como empresas éticas y operar con apego a ese valor y de manera eficiente. El tercer factor incluye mayoritariamente premisas de la dimensión social junto a dos premisas bioéticas. Las sociales incluyen ayudar a resolver problemas sociales, destinar ganancias para actividades benéficas y mejorar la calidad de vida de la comunidad circundante. Parecería que los participantes visualizan la función social de las empresas como una manera de beneficiar con las operaciones de la misma a diversos grupos sociales con los cuales se tiene una relación de mutuo respeto.

El cuarto factor está compuesto de cuatro premisas estrictamente económicas relacionadas con ser efectivos en ese aspecto: maximizar la ganancia de los accionistas, ser lucrativos, producir riqueza y ser competitivos. Esto nos permite deducir que para los participantes es importante el actuar de manera eficiente y eficaz para la obtención de las ganancias de la empresa. El último factor incluye una premisa ética sola: operar de forma ética sin sacrificar las metas económicas. La obtención de ganancias es primordial en relación al actuar ético. En el momento que el actuar y operar éticamente afecte el aspecto económico de la empresa se dará mayor énfasis al logro de esta última.

### Tabla 2: Resultados del análisis factorial

Premisas	Coeficiente	Varianza	Coefic	ciente
	de			cronbach's
Correlación Factor 1 – Dimensión Legal	alpha		36.77**	0.884
Cumplir con los contratos contraídos				
según las normas legales vigentes Contratar y compensar al personal	0.727			
según la ley Actuar de acuerdo a las normas	0.711			
éticas de la sociedad	0.691			
Actuar de forma justa en sus opera- ciones y actividades Evitar que sus operaciones causen	0.675			
cualquier tipo de daño a otros Acatar las leyes que regulan la libre	0.657			
Competencia	0.644			
Cumplir con las leyes ambientales	0.622			
Fomentar conductas éticas entre	0.546			
sus constituyentes Factor 2 – Acoplamiento social	0.546		8.99**	0.856
Ser reconocida como una empresa			0.99	0.850
socialmente responsable	0.674			
Ser reconocida como una empresa Ética	0.640			
Mejorar la calidad de vida de la sociedad 0.587	0.040			
Mejorar la calidad de vida de su comunidad Circundante	0.581			
Operar de forma ética aunque se tenga que sacrificar las metas económicas	0.558			
Pagar impuestos según la ley	0.552			
Producir bienes y servicios según los				
estándares requeridos por la ley	0.551			
Operar eficientemente Factor 3 – Dimensión social	0.504		6.17**	
Pactor 5 – Dimension social			0.812	
Ayudar a resolver problemas sociales	0.722			
Beneficiar con sus operaciones y	0.722			
actividades a diversos grupos Destinar parte de las ganancias a	0.722			
actividades benéficas	0.721			
Mejorar la calidad de vida de su	0.721			
Actividad circundante	0.581			
Establecer relaciones con diversas entidades basadas en el respeto mutuo	0.501			
Factor 4 – Dimensión económica	0.501		4.96**	
			0.732	
Ser lucrativas	0.791			
Producir riqueza	0.720 0.705			
Ser competitivas Maximizar la ganancia de los accionistas	0.705 0.563			
Factor 5 – Dimensión ética	0.505		4.09**	
Operar de forma ética sin sacrificar				
las metas económicas	0.802			
TOTAL **Se valido la importancia de las dimensiones tomar	60.99			

\*\*Se valido la importancia de las dimensiones tomando como base la representatividad de cada una de ellas medida en función de la varianza.

# Funciones de los directivos

La Tabla 3 presenta el promedio obtenido en las premisas relacionadas con las funciones de los directivos. El 50% de las funciones presentadas obtuvieron promedios sobre 80%, excepto el defender el derecho de la empresa a elegir y perseguir sus propios intereses, procurar del mejoramiento de los constituyentes de la empresa y grupos externos, respetar el derecho de diversos grupos (stakeholders) a elegir y procurar sus intereses, así como el resolver problemas sociales. La función más importante de las empresas se vincula con la pregunta anterior. Al ser la dimensión legal la más importante de las empresas, se puede apreciar de igual manera que la función de mayor importancia para los directivos es cumplir con

todas las leyes y normativas vigentes. La única premisa de razonamiento bioético incluida en las primeras cinco funciones es evitar daños a otros con sus acciones u omisiones. No obstante todas las demás premisas resultaron con porcentajes relativamente altos, lo que señala una vez más que el razonamiento bioético tiene cabida en el escenario empresarial.

Tabla 3: Funciones de los directivos

Premisas	Promedio Desviación Estár	ndar
Cumplir con todas las leyes y normativas vigentes	89.27**	16.85
Lograr las metas económicas de la organización	87.08**	19.23
Operar de forma ética	86.68**	19.94
Evitar daños a otros con sus acciones u omisiones	83.54**	21.59
Tomar decisiones justas	82.27**	27.66
Defender el derecho de la empresa a elegir y		
perseguir sus propios intereses	78.97**	22.97
Procurar del mejoramiento de los constituyentes de		
la empresa	78.37**	25.51
Procurar el mejoramiento de grupos externos a la		
empresa	73.43**	25.50
Respetar el derecho de diversos grupos (stakeholders)		
a elegir y procurar sus intereses	70.95**	28.79
Resolver problemas sociales	67.39**	29.95

\*\*Se presentan las principales funciones de los directivos con base en el mayor porcentaje obtenido a través de los participantes.

# Índices De Orientación Hacia Cada Dimensión De La Empresa

#### Índice De Orientación Económica

Se les solicitó a los participantes que expresaran su acuerdo en términos porcentuales con la premisa: las metas económicas de la empresa deben lograrse, sujeto a 13 condiciones tales como cumpliendo con la ley, respetando los derechos de otros, etcétera.

#### Tabla 4 : índice de orientación económica

Premisas	Promedio	Desviación	
		Estándar	
Respetando los derechos de los otros	87.33	21.11	
Sin hacerle daño a otros	87.24	21.23	
Siendo justos	87.23	20.76	
Operando éticamente	84.86	24.15	
Cumpliendo con todas las leyes aplicables	84.75	26.04	
Haciendo algún bien social	79.05	24.26	
Sin importar los medios para lograrlo	45.36	37.77	
Aunque no se haga ningún bien social	34.24	33.00	
Aunque algunos salgan lastimados	29.06	32.42	
Aunque se cometan injusticias	21.55	29.97	
Aunque se violen algunas leyes	21.42	30.39	
Aunque implique acciones no éticas	21.18	27.66	
Aunque se violenten los derechos de algunos	19.99	31.28	
Promedio índice económico	54.10	12.90	
Promedio índice bioético	79.54	17.68	

Se reflejan los resultados obtenidos en la pregunta específica de la dimensión económica.

Todas las condiciones positivas recibieron porcentajes altos de acuerdo, y las condiciones negativas porcentajes bajos. Se calculó un índice de orientación sumando las respuestas a las condiciones negativas y restando las de las condiciones positivas. El resultado se convirtió a una escala porcentual. Mientras más alto el índice, más orientados están los participantes a conseguir las metas económicas de la empresa aunque ello suponga acciones ilegales o no éticas. Un índice equilibrado como el obtenido en los resultados refleja que los participantes favorecen conseguir las metas económicas de manera ecuánime con respecto al violentar los derechos de otros, cometer injusticias o actos no éticos, etc.

### Dimensión Legal

Se les solicitó a los participantes que expresaran su acuerdo en términos porcentuales con la premisa: las empresas deben cumplir con todas las leyes, sujeto a 13 condiciones tales como: siempre, para evitar penalidades, para ser un buen ciudadano, etcétera. Las premisas relacionadas con condiciones un tanto negativas recibieron porcentajes bajos y las positivas, altos. se calculó el índice de orientación legal, el cual resultó relativamente alto y definitivamente más alto que el índice de orientación económica. Las dos premisas que más acuerdos generaron es que las empresas deben de cumplir con las leyes para evitar penalidades y siempre se debe cumplir con la misma. Consistente con los resultados obtenidos en el análisis factorial, el cumplimiento de las leyes parece ser percibido como una forma de evitar daños.

Tabla 5: índice de orientación legal

Premisas	Promedio	Desviación
		Estándar
Para evitar penalidades	87.30	20.09
Siempre	85.59	22.47
Para evitar causar daños a otros	85.01	21.17
Para defender los derechos de la empresa	84.69	20.50
Porque es lo ético	83.10	24.21
Porque es lo justo	82.62	24.35
Para respetar los derechos de los otros	82.41	23.46
Para hacer bien a otros	81.02	23.72
Y en algunos casos autoimponerse estándares más altos	77.95	27.97
Para ser un buen ciudadano	77.76	27.13
Aunque se afecten las metas económicas	70.38	31.59
*Porque resulta más económico que violarlas	70.10	32.79
Si no se afectan las metas económicas	59.83	35.65
Promedio índice legal	79.06	15.04
Promedio índice bioético	83.39	17.40

Se reflejan los resultados obtenidos en la pregunta específica de la dimensión legal.

Resultó interesante que las tres premisas de menor acuerdo son las relacionadas con condiciones económicas. Por un lado, cumplir con las leyes, aun a expensas de no lograr las metas económicas, recibió un acuerdo moderadamente alto; pero cumplir con las leyes si no se afectan las metas económicas, recibió un muy débil desacuerdo. Esto refleja cierta duda en los participantes y una cierta propensión a violentar algunas leyes, si hubiera alguna consideración económica tal vez importante. Sin embargo, cumplir con las leyes porque es más económico cumplirlas que violarlas recibió un acuerdo moderado lo cual sugiere que la consideración económica es moderadamente importante para los participantes a la hora de cumplir con las leyes. Estos resultados sugieren que pudiera haber unas leyes particulares asociadas a unos costos económicos lo suficientemente altos como para que los participantes consideren violentar la ley. El índice bioético calculado en esta dimensión resultó alto el más alto de las cuatro dimensiones. Este resultado sugiere que los participantes utilizan el razonamiento bioético como base para el cumplimiento legal. Resultaron particularmente importantes las premisas de cumplir con la ley para evitar penalidades, evitar daños y respetar los derechos de otros, los cuales están relacionados con los principios de no maleficencia y de autonomía.

### Dimensión ética

Se les solicitó a los participantes que expresaran su acuerdo en términos porcentuales con la premisa: las empresas deben actuar de forma ética, sujeto a 12 condiciones tales como: siempre, porque es lo justo, para mejorar la imagen de la empresa, etcétera. Al igual que en la pregunta anterior, las premisas relacionadas con condiciones un tanto negativas recibieron porcentajes bajos y las positivas, altos, excepto la premisa de mejorar la imagen de la empresa, que recibió un acuerdo bastante elevado, a pesar de que a juicio de las autoras esa no debería ser una razón para actuar éticamente, aun cuando es un valor

agregado deseable. Las tres premisas vinculadas a condiciones un tanto negativas, recibieron porcentajes de acuerdo desde moderadamente alto hasta un débil desacuerdo.

Actuar éticamente, pero no más de lo requerido por ley, recibió un débil apoyo, lo que nos da a entender que para muchos participantes su visión de la ética es estrictamente legalista.La última, comportarse éticamente sujeto a que no se afecten las metas económicas, recibió un débil desacuerdo sugiriendo que los participantes podrían actuar de forma no ética si las consecuencias económicas, a su juicio, lo ameritara.

Tabla 6 :índice de orientación ética

Premisas	Promedio	Desviación	
		Estándar	
Siempre	84.38	24.82	
Para mejorar la imagen de la empresa	84.27	21.34	
Para evitar causar daños a otros	81.30	24.79	
Porque es lo justo	80.85	25.50	
Para defender la autonomía de la empresa	80.61	24.05	
Para respetar la autonomía y dignidad de los otros	80.10	24.79	
Para hacerle bien a otros	79.96	24.52	
Aunque implique más restricciones de las establecidas			
por la ley	73.34	30.49	
Porque es una forma de aumentar las ganancias	70.93	29.47	
Aunque se afecten las metas económicas	69.39	30.78	
Pero no más de lo que se le requiere por ley	66.47	32.11	
Si no se afectan las metas económicas	62.18	34.16	
Promedio índice ética	76.15	15.94	
Promedio índice bioético	80.65	19.32	

Se reflejan los resultados obtenidos en la pregunta específica de la dimensión ética..

Siguiendo el procedimiento anterior, se calculó el índice de orientación ética, el cual resultó moderadamente alto. La premisa que más acuerdo generó es que se debe actuar de forma ética siempre. Al igual que con el cumplimiento de las leyes, el comportamiento ético parece ser percibido como una forma de evitar causar daños. El índice bioético calculado en esta dimensión también resultó alto. Este resultado sugiere que los participantes utilizan el razonamiento bioético como complemento del razonamiento ético. Este resultado es acorde con los anteriores respecto a la utilidad del razonamiento bioético en el mundo de los negocios.

### Dimensión de Libre Discreción

La Tabla 7 muestra los resultados obtenidos en la pregunta específica de la dimensión de libre discreción o social. Se les solicitó a los participantes que expresaran su acuerdo en términos porcentuales con la premisa: las empresas deben ser socialmente responsables, sujeto a 13 condiciones tales como: siempre, porque es lo justo, para obtener mayores ganancias, etcétera. Las premisas relacionadas con condiciones un tanto negativas recibieron porcentajes más altos de los esperados. La premisa sobre mejorar la imagen obtuvo un acuerdo alto, la de obtener mayores ganancias, un acuerdo moderadamente alto y la de si no se afectan las metas económicas, un débil acuerdo.La premisa, aunque se afecten las metas económicas, recibió un acuerdo relativamente alto. Tomadas en conjunto, estos resultados sugieren que los participantes entienden que las empresas deben ser socialmente responsables, pero siempre y cuando su imagen no se distorsione y sus metas económicas no se vean afectadas, lo cual influiría en su actuación como empresa socialmente responsable.

Tabla 7 : índice de orientación social (libre discreción)

Premisas	Promedio	Desviación
		Estándar
Siempre	85.41	22.88
Para mejorar su imagen	83.01	23.09
Porque es lo ético	82.69	24.21
Para evitar causar daños a otros	82.47	23.42
Porque es lo justo	82.32	24.17
Para respetar los derechos de los otros	81.75	24.20
Para defender los derechos de la empresa	79.77	23,86
Para hacerle bien a otros	79.13	25.60
Porque es parte de sus funciones	78.12	25.83
Para ser un buen ciudadano	77.14	28.02
Para obtener mayores ganancias	76.92	28.08
Aunque se afecten las metas económicas	69.54	30.14
Si no se afectan las metas económicas	63.79	32.94
Promedio índice social	78.62	16.57
Promedio índice bioético	81.22	18.74

Se reflejan los resultados obtenidos en la pregunta específica de la dimensión social. Relación de los Índices

Tabla 8: Correlaciones y coeficientes de confiabilidad de los índices

	1	2	3	4	5	6	7	8	9	10
RSE										
Económico	364**									
Legal	.502**	512**								
Legal Ético	.386**	481**	.684**							
Social	.522**	- 480**	.700 <sup>**</sup> .386 <sup>**</sup>	.649**						
Bioético General	.838**	313** 968** 466** 453**	.386**	.332**	.446**					
Bioético Económico	.376**	968**	$487^{**}$	.469**	.502**	.321**				
Bioético Legal	.512**	466**	.895**	.591**	.674**	.409**	.467**			
Bioético Ético	.524**	- 453**	.687**	.764**	.726**	.416**	.472**	.720**		
Bioético Social	.560**	410**	.659**	.555**	.889**	.461**	.444**	.693**	.763**	

\*\*Se reflejan los resultados obtenidos en las correlaciones y coeficientes de confiabilidad de los índices.

Todos los índices tienen una correlación inversa con el índice económico y positivo entre los demás. En términos generales, esto sugiere que cuanto más orientado se esté hacia las otras dimensiones de la empresa, o cuanto más presente esté el razonamiento bioético, menos orientado se estará hacia las metas económicas y viceversa. Las tres correlaciones más altas del índice económico fueron con los índices bioético – económico, legal y ético. Esto sugiere que cuanto más se consideren los principios bioéticos, las dimensiones legales y éticas de la empresa, menos orientado estará el individuo hacia las metas económicas. Dicho de otra forma, el razonamiento bioético, ético y legal ofrecen límites, o tal vez dirección, a la función económica de la empresa. Las correlaciones positivas más altas, sobre .80, se dieron entre el índice de responsabilidad social empresarial y el índice bioético social. Esto sugiere que el razonamiento bioético sirve como justificación para la función de responsabilidad social empresarial y para el cumplimiento de la ética, responsabilidad social y actuar de acuerdo con las leyes y normativas vigentes.

### Comparación De Empresas Exitosas Y Socialmente Responsables

Se les solicitó a los participantes que, de un listado de 15 características, indicaran en términos porcentuales cuáles de estas eran necesarias para catalogar a una empresa como exitosa y como socialmente responsable. La Tabla 9 presenta los resultados a esta pregunta, incluyendo la diferencia en los promedios obtenidos y su nivel de significancia.

	Empresa ex	itosa I	Empresa socialmente	responsable		
Premisas	Promedio	DesviaciónPro estándar	omedio DesviaciónDi es	ferencia Sig. stándar		
Es competitiva Es eficiente Produce riqueza Es lucrativa Cumple con tedas	91.87 91.04 89.09 88.23	16.21 17.45 19.38 18.95	78.52 82.94 72.73 70.74	25.27 22.93 28.19 28.52	13.35 8.10 16.36 17.49	.000 .638 .107 .000
Cumple con todas las leyes Maximiza la ganancia	85.72	20.67	87.23	21.10	- 1.51	.000
de los accionistas Estándares de	84.43	23.36	69.42	29.20	15.01	.000
excelencia Derechos de los internos	83.36 82.97	22.99 21.22	78.20 80.11	29.19 28.37	5.16 2.86	.000 .000
Es justa en sus opera- ciones y actividades	82.97	21.22	86.58	28.37	- 3.81	.000
Mejoramiento de sus internos Opera de forma ética	82.37 81.45	21.13 23.66	81.84 88.32	22.96 19.41	0.53 - 6.87	.000 .000
Derechos de los externos	79.30	23.00	80.66	28.01	- 0.87	.330
Estándares éticos No le causa daño a	78.72	25.53	79.30	29.27	- 0.58	.031
Otros Mejoramiento de sus Externos	77.72 76.78	24.77 24.40	87.24 85.92	21.38 20.36	- 9.52 - 9.14	.710
LAUII05	/0./0	27.70	05.72	20.50	- ).14	.000

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I abla U · Caractaristicas da	omnrococ	AVITOCOC 1	u coolalmonto	rachancahlac
Tabla 9 : Características de	Uningesas	CAILUSAS	v socialiticitic	ICSDOHSaDICS
			,	

Se refleja en esta tabla las características que los participantes perciben para que una empresa sea exitosa y socialmente responsable.

Hubo diferencias significativas, al .000 de significancia en 10 premisas, al .050 en una premisa y cuatro en las cuales la diferencia no fue significativa. Esto sugiere que a los que, según los participantes, se requieren unas características para que la empresa sea exitosa y otras para ser socialmente responsable lo cual refleja que podrían ser metas mutuamente excluyentes. Lo más importante para que la empresa sea exitosa es que sea competitiva, eficiente, que produzca riqueza, que sea lucrativa y cumpla con todas las leyes. Todo parece indicar que los participantes definen el éxito de una empresa en términos económicos pero desarrollando operaciones apegadas a la ley. Las características menos importantes para que la empresa sea exitosa son que contribuya al mejoramiento de los grupos externos y de la sociedad, y que se autoimponga estándares éticos más allá de los requeridos por ley.

Esto reafirma que el éxito no se mide por la función social o el comportamiento ético de las empresas. Parece ser que basta con cumplir con la ley. Las características más importantes para ser una empresa socialmente responsable son: operar en forma ética, no causar daños a otros, cumplir con todas las leyes, ser justa en sus operaciones y actividades, contribuir al mejoramiento de los grupos externos. Cuatro de las cinco premisas de razonamiento bioético fueron seleccionadas como de las más necesarias para ser socialmente responsables y las dos premisas relativas al comportamiento ético.

Los participantes entienden la responsabilidad social de las empresas como aquel comportamiento ético sensible a las necesidades de los grupos de interés y el bienestar de la sociedad. Las menos necesarias son maximizar la ganancia de los accionistas, ser lucrativas, producir riqueza y ser competitivas. Parecería que los participantes perciben a las empresas socialmente responsables como organizaciones sin fines de lucro, un tanto incapaces de ser lucrativas o producir riqueza.Las característica que no fueron identificadas contundentemente con una alternativa o la otra fue el ser eficiente, el no causar daño a otros, respetar los derechos de los constituyentes externos y el ser eficiente, las cuales identificaron como bastante necesaria para ambas premisas.

# CONCLUSIONES

Se determinó la importancia de los principios bioéticos en la definición de lo que constituye una empresa. Los resultados demostraron que todos los principios bioéticos fueron relevantes e importantes. Se confirmó parcialmente la validez de las cuatro dimensiones del modelo de Carroll (1979) y su importancia relativa. Se obtuvieron índices de confiabilidad superiores a 0.70 en cada una de las dimensiones lo que hace fiable el instrumento de López y Rivera (2010).

La dimensión legal es la más importante de las empresas, se puede apreciar de igual manera que la función de mayor importancia para los directivos es cumplir con todas las leyes y normativas vigentes pero cuidando evitar daños a otros con sus acciones u omisiones, única premisa del razonamiento bioético. Se identificaron las características que deben tener las empresas para ser consideradas exitosas, socialmente responsables y el efecto de los principios bioéticos para lograrlo. Se encontró que el éxito de las empresas se define principalmente por variables económicas y las socialmente responsables por su sensibilidad social y ética. Los principios bioéticos resultaron más importantes para definir las empresas socialmente responsables que las exitosas. Todo estudio confronta ciertas limitaciones que deben ser informadas. Dado que la muestra no fue seleccionada aleatoriamente, los resultados no pueden, y no han sido, generalizados a la población. Como en todo cuestionario auto cumplimentado es posible que las respuestas ofrecidas por los participantes no necesariamente reflejen su sentir completamente.

Independientemente de los avances logrados en la investigación de la RSE aún quedan muchas preguntas por responder. Sigue siendo necesario elaborar instrumentos de medición validos y confiables. Dada la complejidad de los conflictos éticos de estos tiempos es necesario continuar haciendo estudios multidisciplinarios que provean nuevas y variadas perspectivas que permitan mejorar la formación de los futuros directivos y empresarios. Este estudio pretende ser un pequeño paso en esa dirección.

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# **CULTURE PROSECUTOR IN MEXICO**

Fidel Antonio Mendoza Shaw, Universidad Estatal De Sonora

### RESUMEN

Durante las últimas décadas en México, la fuente principal de los ingresos provenían del petróleo, esta situación comienza a cambiar a partir de los años noventa con la disminución de estos ingresos, es por ello que ante esta situación el Estado procede a redimensionar sus fuentes de ingreso, recurriendo a mejorar la recaudación tributaria y por ende el fomentar una mayor y mejor Cultura Tributaria por parte de los ciudadanos.La conducta humana no está totalmente determinada genéticamente, sino que esta se puede modificar y educar transformando los aspectos indeseables en productivos y aceptables para el conjunto de la sociedad (Velarde, 2006:48-51).Es necesario el inducir la conducta del contribuyente, para lograr que este adopte la decisión de cumplir voluntariamente con sus obligaciones tributarias.Por ello es necesario profundizar la relación que debe de darse entre el ciudadano y el Estado para que se desarrolle una cultura necesaria que incida en el ciudadano en concebir las responsabilidades tributarias como un deber primordial y en concordancia con los valores de una sociedad inspirados en la supremacía del bien común.Velarde (2006:46), menciona que desarrollar dicha cultura no es, sin embargo una tarea fácil, pues requiere de una convergencia de políticas de control con políticas de carácter educativo.

# **CULTURE PROSECUTOR IN MEXICO**

# ABSTRACT

During the last few decades in Mexico, source main income came from petroleum, this situation began to change from the early 1990s with the decline of these revenues, is why this situation the State proceeds to resize their sources of income, resorting to improve revenue tax and thus promoting a greater and better tax culture by citizens. Human behavior is not completely determined genetically, but this can be change and educate the undesirable aspects becoming productive and acceptable to the whole of society (Velarde, 2006: 48-51). It is necessary to induce the behaviour of the taxpayer, to achieve this the decision to voluntarily comply with their tax obligations. Therefore it is necessary to deepen the relationship that must be given between the citizen and the State for the development of a necessary culture affecting the citizen to devise the tax as a primary duty responsibilities and in accordance with the values of a society inspired by the supremacy of the common good.

JEL: H2

**KEYWORDS:** Tax Culture, Mexico

## INTRODUCCIÓN

Para generar el bienestar social que México necesita se debe de recaudar por arriba del 15% del Producto Interno Bruto (PIB). Las reformas fiscales que se han implementado en los últimos 40 años no han logrado superar el 10% de recaudación. Por ello se requiere que la parte de la población que debe pagar impuestos y no lo hace lo haga, y de esta manera se cubriría ese déficit del 5% del (PIB) que se plantea. La evasión reconocida en México de forma oficial en 1998 era de un 37% y para 1999 se reconoció un 45% Tapia, (2000:30). Al respecto, opina que la evasión en México es alarmante y que para acabar con el problema se requiere de voluntad política: "La autoridad sabe en dónde se encuentran los evasores fiscales. Por otra parte, resulta apremiante hacer el sistema tributario menos complicado, que sea cierto y seguro desde el punto de vista jurídico. Que rebase políticas sexenales, y que la educación tributaria se

inicie desde la educación primaria, para que se tome conciencia de que tenemos que contribuir al gasto público pagando nuestros impuestos".La corriente de análisis de la evasión considera aspectos relacionados con el comportamiento del gobierno en el gasto como determinante de la disposición a pagar impuestos deriva de la idea del Estado como comunidad alentada por la confianza entre ciudadanos y quizá también por la confianza en el gobierno apuntada por uno de los hacendistas más destacados (Slemrod, 2003:877).De nada sirve el estar modificando leyes y reglamentos si los ciudadanos no tienen una Cultura Fiscal que propicie el cumplimiento consciente y voluntario de sus obligaciones.

Se debe consolidar el fomento de la Cultura Tributaria desde tempranas edades, donde cada estudiante tenga oportunidad de disertar acerca del compromiso que debe tener con el desarrollo del país y así poder corregir conductas arraigadas de evasión de impuestos que se han hecho presentes continuamente en un número significativo de individuos para escaparse de los deberes con el Estado. Se desea que los estudiantes entiendan la existencia de la cultura tributaria y sean agentes multiplicadores en sus hogares para el fortalecimiento y crecimiento del país.

# DESARROLLO

Diep (1999:6), menciona que desde sus orígenes la obligación de tributar fue producto de la dominación, es decir, de la imposición del dominador sobre el dominado, así fuera en su carácter de gobernante, conquistador o simple opresor, siempre que se valiese de la fuerza en cualquiera de sus múltiples formas convencionales e históricas, incluyendo la magia y el dominio de la mujer sobre el hombre o de este sobre aquella, del mayor sobre el menor, del viejo sobre el joven o viceversa, del rico sobre el pobre, del sano sobre el enfermo, etc. La conducta humana no está totalmente determinada genéticamente, sino que esta se puede modificar y educar transformando los aspectos indeseables en productivos y aceptables para el conjunto de la sociedad (Velarde, 2006:48-51).

Es necesario el inducir la conducta del contribuyente, para lograr que este adopte la decisión de cumplir voluntariamente con sus obligaciones tributarias. Por ello es necesario profundizar la relación que debe de darse entre el ciudadano y el Estado para que se desarrolle una cultura necesaria que incida en el ciudadano en concebir las responsabilidades tributarias como un deber primordial y en concordancia con los valores de una sociedad inspirados en la supremacía del bien común. Velarde (2006:46), menciona que desarrollar dicha cultura no es, sin embargo una tarea fácil, pues requiere de una convergencia de políticas de control con políticas de carácter educativo. La esencia del problema tributario, pues, no únicamente subsiste y se manifiesta plenamente vigente, aunque tamizada o matizada en el tiempo y en la ley, sino que sigue dolorosamente presente en sus manifestaciones y efectos, incluso secundarios o ajenos a la concepción clásica del impuesto como figura legislativa que recogiera en parte la vieja concepción universalista del tributo, de tal forma que no puede ser soslayada su presencia notoriamente fatal en el impacto puramente contributivo que asume en el presente (Diep, 1999:66).

La administración tributaria necesita alcanzar un control fiscal, para evitar la evasión, la elusión y la prescripción de los tributos, utilizando una cultura tributaria que eduque a la población sobre los conocimientos tributarios indispensables que generen nuevos comportamientos y que ayuden a tener una recta convivencia social. Si se logra un nuevo comportamiento en los contribuyentes, los mismos cumplirán voluntariamente los deberes formales, habrá correcto pago de los tributos, a su vez aumentaran los recursos que ingresan al fisco y ayudara a compensar los ingresos petroleros, el déficit fiscal, el gasto social, la deuda pública e inversión pública. El término evasión fiscal significa fuga, evasión, despacho de un negocio, evasor es el que se evade y evasivo de lo que sirve para eludir o evitar. Según Tapia (2000:80), es un fenómeno social y de moral pública que se ha dado en todos los tiempos, el cual ha tenido lugar tanto en países desarrollados como en países en vías de desarrollo donde también la evasión fiscal la tipifica como la ocultación o simulación de cuentas de ingresos o gastos con el fin de pagar

montos menores de impuestos. Señala que el mayor o menor grado de evasión y rechazo al pago de los impuestos depende de en primer orden de importancia a la Cultura Fiscal.

La Cultura Fiscal es el conjunto de valores que se manifiestan en el cumplimiento permanente de los deberes tributarios con base en la razón, la confianza y la afirmación de los valores de la ética personal, respecto a la ley, responsabilidad ciudadana y solidaridad social de los contribuyentes. Rivera y Sojo (2002:95), expresan que la Cultura Tributaria no se puede entender como el conjunto de conocimientos que tienen los ciudadanos sobre las obligaciones y responsabilidades contributivas sino, la forma en que construyen una imagen de los impuestos a partir de una combinación de información y experiencias sobre la acción y el desempeño del Estado. La cultura es transmitida de una generación a otra por la enseñanza de valores, conocimientos y otros factores que influyen en la conducta. El lenguaje es el principal medio de transmisión de la cultura Berger y Luckmann, (1972:185). Este proceso se da una vez objetivado y sedimentado un comportamiento. Cuando las instituciones son incorporadas al lenguaje, que también es una institución, se convierten en un cuerpo de conocimiento accesible en general y se puede incorporar a la tradición y a la cultura de la sociedad y de la organización. Schmolders (1970:330) dice que ha sido la actitud hacia los impuestos entendida esta como la construcción compleja formada a partir de las creencias de los individuos y al tratar la actitud hacia los impuestos, dice que hay una propensión cultural fiscal individual tendiente a tener una actitud de comportamiento irregular.

# CONCLUSIÓN

A nivel mundial y en cada país, para que los Estados puedan cumplir con su obligación constitucional de velar por el bien común y proporcionar a la población los servicios básicos que ésta requiere, necesita de recursos que provienen principalmente de los tributos pagados por los contribuyentes en la modalidad de personas naturales o jurídicas. Los mexicanos tienen la obligación de contribuir con el gasto público de acuerdo con el artículo 31 párrafo primero fracción IV de la Constitución Política de los Estados Unidos Mexicanos que dice: "Son obligaciones de los mexicanos: contribuir para los gastos públicos, así de la Federación como del Distrito Federal o del Estado y Municipio en que residan, de la manera proporcional y equitativa que dispongan las leyes fiscales". Al hacer referencia a las personas naturales, Ruiz (2005:21) establece "se trata del individuo natural, persona biológicamente establecida"; así pues las personas las que conforman una entidad, organización, parroquia, municipio, estado, país. Pero más allá de la importancia de contar con personas, mejor aún es contar con ciudadanos y ciudadanas que desarrollan una Cultura Tributaria en función del beneficio personal y colectivo del país.

Desde la perspectiva de Pietro (2006:3) un ciudadano es: "un miembro de una comunidad política que goza de deberes y una serie de derechos para participar en una comunidad, a través de la acción autorregulada, inclusiva, pacífica y responsable, con el objetivo de optimizar el bienestar público". Por consiguiente, para que una persona ejerza la ciudadanía debe respetar los derechos de los demás, contribuir al bien común, respetar los valores predominantes que incluyen el sentido de justicia y de equidad. Por su parte, en el diseño curricular del nivel de educación se menciona que los valores surgen por una crisis social que caracteriza la época actual. Por lo tanto, la educación en valores se presenta como una Competencia esencial para promover cambios significativos en la formación del ser humano para que sea capaz de desenvolverse en la sociedad actual.

En este mismo orden, la escuela como espacio de socialización del conocimiento juega un papel fundamental en la formación del ser humano considerándose la misma como un complemento del hogar en donde se le da gran importancia a los valores. No obstante, es necesario tener en cuenta que en oportunidades los contribuyentes, escasamente cumplen con esas obligaciones por diversas causas, entre las cuales se citan las expuestas por Ruiz (2005:18): "Desconocen la existencia de alguna obligación tributaria (sobre todo por parte de las pequeñas empresas). Otras veces, aun conociendo la existencia de tal o cual obligación tributaria, no saben cómo y/o cuando cumplir. Algunos empresarios no cuentan con los mecanismos de control o de registros mecanizados que algunas obligaciones tributarias requieren para que las puedan cumplir. En las ciudades o poblaciones del interior del

país, los contribuyentes carecen de asesoría pública (de parte de las administraciones tributarias para orientarles como cumplir con sus obligaciones), o carecen de asesoría privada." De acuerdo con lo antes mencionado, puede que algunos profesionistas desconozcan sus obligaciones o al conocerlas olviden su deber de cancelarlas al Estado; sin duda, sea cual sea la situación, el comportamiento de los ciudadanos al cometer la evasión fiscal está relacionada con la escasa Cultura Tributaria y el cumplimiento de sus deberes. Así pues, a efecto de fortalecer la Cultura Tributaria, definida ésta por Díaz (2005:1) "como el conjunto de valores, creencias y actitudes compartidas por una sociedad respecto a la tributación y las leyes que la rigen", la cual conduce al cumplimiento permanente de los deberes fiscales, se requiere que a población obtenga conocimiento sobre el tema y comprenda la importancia de sus responsabilidades tributarias. En función de lo planteado, conviene mencionar que la Cultura Tributaria se alimenta de información oportuna y de formación adecuada, las cuales deben conducir hacia la aceptación, derivada de la concienciación. Ésta es indispensable para lograr una recaudación firme y sostenible en el mediano y largo plazo, de manera que también sea posible cumplir los compromisos del Pacto Fiscal estipulado en las leyes y ordenanzas.

Considerando lo expresado, Rincones (2005:2) se refiere a que "los ejes centrales para la promoción de la Cultura Tributaria son la Información, la Formación y la Concienciación", los cuales se articulan en torno a la razón como móvil deseable fundamental de la acción de tributar, y se incorporan en una estrategia de comunicación cuyo mensaje central pudiera ser "para que el Estado pueda cumplir con sus obligaciones, yo como ciudadano, debo asumir mi responsabilidad de pagar impuestos porque, al hacerlo, cumplo con el país". En consecuencia, ese mensaje, información, formación y concienciación, lo más lógico es promoverlo desde la educación con el propósito de ir formando las generaciones de relevo con una Cultura Tributaria que los induzca voluntariamente a asumir actitudes de responsabilidad y compromiso ante el fisco por medio de la cancelación oportuna de los impuestos y así ir corrigiendo conductas indisciplinadas que tiene que ver con el cumplimiento de las responsabilidades como ciudadanos de un país. Al respecto Artigas (2005:3) refiere: "La generación de conciencia tributaria es un objetivo imprescindible en toda estrategia orientada a promover de manera sostenida el cumplimiento voluntario de las obligaciones tributarias y, en consecuencia, es una tarea que debe comenzarse desde la educación dado que los temas tributarios y aduaneros deben convertirse en un contenido incluido en la enseñanza escolar, ya que son elementos constitutivos de la ciudadanía y están en íntima relación con la incorporación de valores." En otros términos, es importante recalcar que la Universidad es un espacio fundamental para desarrollar en los estudiantes actitudes de responsabilidad y compromiso frente al bien común, de allí lo fundamental de incorporar el tema de Cultura Tributaria dentro de la línea de acción educativa, como Competencia esencial para que su aplicación sea obligatoria en la estructura curricular del sistema universitario educativo; esto es abordar el fortalecimiento de los valores.

Esto permitiría asignar mayores recursos a la creación y el fomento de infraestructura productiva y social, a los sectores sociales en pobreza extrema, y a las funciones sociales que contribuyan al mejoramiento de los recursos humanos del país: salud, seguridad social, educación, infraestructura hidráulica y vivienda. Chávez (2002:14). Según Bruner (1988:138), la cultura es una riqueza, un capital social, que tiene su lógica. Si no se cultivo durante años, mejor aún durante siglos, no se puede ahora improvisar ni suponerla es un capital que hay que crearlo y lleva su tiempo. Pero se puede crear, sólo hay que saber cómo hacerlo. Estamos hoy en convivencia de una sociedad donde el poder se sustenta en el conocimiento y sobre estos hay que crear la nueva cultura tributaria. No hay otro camino. Conocimiento significa información completa, un riguroso análisis, planteamiento de todos los escenarios posibles. El autor, Moreno (1998:58) explica que: a la Cultura Tributaria se le alude al hablar de información o desinformación del contribuyente, cumplimiento voluntario o forzoso de sus obligaciones, evasión o fraude fiscal, y en general, cuando se mencionaban las circunstancias personales y sociales de quienes pagan los impuestos, y se habla así de países con un elevado grado de cultura tributaria. Pero como los valores éticos que sustenta una sociedad son parte de su cultura, resulta igualmente cierto que una sólida cultura impositiva presupone una conciencia tributaria de cierta solidez por parte de los contribuyentes.

Cabe considerar que la falta de Cultura Tributaria es la principal causa de la evasión y los ilícitos tributarios, dentro de la cual está inmersa la administración tributaria en general, trayendo como consecuencia el desmejoramiento, principalmente del sistema de recaudación tributaria, y los altos índices de evasión y fraude fiscal, así como el desconocimiento, por parte del ciudadano, del cumplimiento de los deberes formales establecidos en las distintas leyes que rigen los tributos. Por lo expresado, para lograr el aprendizaje en los estudiantes es importante la innovación, ser creativo, utilizar los recursos disponibles en el medio con el uso de una serie de estrategias que solo dependen de la capacidad e inventiva del docente; así pues, Cortázar (2003:1) propone tres estrategias capaces de potenciar el carácter educativo de las acciones de la administración tributaria y fomentar de esta manera una Cultura Tributaria; ellas consisten en: acciones de publicidad y difusión sobre los valores que deben motivar al ciudadano a cumplir con sus obligaciones tributarias; así mismo, hace mención de las acciones de formación tributaria en el medio escolar y por último, hace referencia a las acciones de formación de conciencia tributaria en colectividades específicas.

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# IMPORTANCIA ESTRATÉGICA DEL CAPITAL INTELECTUAL EN LA INDUSTRIA MANUFACTURERA DE LA REGIÓN SURESTE DEL ESTADO DE COAHUILA, MÉXICO

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#### RESUMEN

Durante las crisis económicas que surgieron en México en el siglo pasado, los primeros gastos que se reducían eran sueldos, prestaciones e inversión en capacitación, provocando perdida de eficiencia, desmotivación e inseguridad en el trabajo. Por lo cual se comienza a medir capacidades y conocimiento. En el siglo XXI las organizaciones enfrentan un sorprendente desafío obligándolas a evaluar en términos de conocimiento, considerando el capital intelectual como activos intangibles y factor principal que agrega valor a las empresas actuales. En la región de estudio, un alto porcentaje de empresas se encuentra en vías de desarrollo, dificultando la gestión del conocimiento y aplicación de nuevas tecnologías, falta de estrategias para fortalecer las relaciones con actores externos. Por consiguiente el objetivo de esta investigación es conocer las estrategias aplicadas para gestionar el conocimiento en la organización y la importancia de generar capital intelectual. En esta investigación se aplicó un cuestionario el cual está compuesto de tres bloques que se relacionan con los elementos del capital intelectual. Los resultados preliminares, nos indican falta de capacitación, tecnología adecuada, falta de experiencia en técnicas informáticas, recursos económicos para invertir en I+D, y poco conocimiento de los mercados internacionales.

PALABRAS CLAVE: Capital intelectual, gestión del conocimiento, innovación y tecnologías

# STRATEGIC IMPORTANCE OF CAPITAL INTELLECTUAL IN MANUFACTURING OF SOUTHEAST REGION COAHUILA STATE, MEXICO

#### ABSTRACT

During the economic crisis that emerged in Mexico in the last century, the first expenses were reduced salaries, benefits and investment in training, causing loss of efficiency, motivation and job insecurity. Therefore it begins to measure skills and knowledge. In the XXI century organizations face a staggering challenge forcing them to assess in terms of knowledge, considering the intellectual capital and intangible assets main factor that adds value to existing businesses. In the study area, a high percentage of business is developing, making knowledge management and application of new technologies, lack of strategies to strengthen relations with external actors. Therefore, the purpose of this research is to understand the strategies used to manage knowledge in the organization and the importance of generating intellectual capital. In this research, a questionnaire which consists of three blocks that relate to the elements of intellectual capital.Preliminary results indicate a lack of training, appropriate technology, lack of experience in information technology, financial resources to invest in R & D, and little knowledge of international markets.

#### **JEL:** M59

**KEYWORDS**: Intellectual capital, knowledge management, innovation and technology

## INTRODUCCIÓN

Los cambios percibidos por la economía mexicana durante dos décadas han llevado consigo transformaciones en la estructura económica; la apertura comercial ha intervenido sobre el patrón de la actividad económica en todo el territorio nacional, principalmente en la industria manufacturera; es en este sector donde se aprecian los cambios de la actividad económica, principalmente en los estados del norte y centro de México. Desde las microempresas hasta las grandes empresas han tenido que desafiar y competir en una economía dinámica y diferente que ha provocado que sus actividades cambien de manera radical , pues la influencia de las tecnologías de información y comunicación, la evolución y alcances del conocimiento y la globalización, han provocado que la competencia sea más agresiva, teniendo que generar estrategias ofensivas que les permitan mantenerse dentro del mercado, en el gusto del consumidor y que también las distinga de las demás.

Las organizaciones independientemente de su magnitud, siempre han estado constituidas por personas, anteriormente eran consideradas seres totalmente pasivos y apagados que sólo producían, ahora se catalogan entes activos, así como una herramienta poderosa con un cúmulo de conocimientos capaces de contribuir en la generación de información valiosa que impacta en la organización alcanzando sus objetivos. Hoy en día los conocimientos o bienes intelectuales son un factor de la producción y se han vuelto tarea sustancial de las organizaciones. En los escenarios presentes, las organizaciones más rentables serán las que con los recursos existentes mejor gestionan su principal activo: *el conocimiento*, para producir con mejor y mayor calidad en beneficio tanto del trabajador como de la empresa.

# **REVISIÓN LITERARIA**

Hoy en día en el entorno global se suscitan cambios vertiginosos y las condiciones actuales cambian de un instante a otro, debido a la turbulencia de los mercados, a las innovaciones de bienes y/o servicios, a cambios tecnológicos, a la búsqueda de estrategias por parte de los competidores, a modificaciones en los gustos, deseos y necesidades de los consumidores, a las tendencias, modas, etc. Para que las empresas puedan sobrevivir en el mercado, tanto la innovación como los conocimientos son las herramienta que les proporcionarán ventajas competitivas sostenibles (CIDEC, 2000, Serradel y Pérez, 2003).

Invariablemente las empresas consideraban que sus ventajas competitivas derivaban de estrategias como: *el liderazgo en precios bajos* (incremento de ventas y utilidades), *la diferenciación* (bienes con características o plus que los distinga de la competencia) *o la focalización* (atender a un mercado específico). Actualmente para las empresas una estrategia que no era apreciada, *es el conocimiento*, la importancia de este como recurso estratégico y elemento de ventaja competitiva sostenible presupone un cambio en la forma de concebir la gestión de las organizaciones. Bueno et al. (2003) señala: las bases tradicionales de la ventaja competitiva han comenzado a erosionarse.

Kaplan (1987) afirman que "el valor económico de una organización no es únicamente la suma de los valores de sus activos tangibles, sino que también incluye el valor de activos intangibles como el stock de productos innovadores, el conocimiento de procesos de producción flexibles y de alta calidad, el talento de su personal, la fidelidad del cliente, la confianza en los proveedores, etc.". Explica Bueno et.al. (2001) que en el siglo XXI el conocimiento es el recurso estratégico más preciado y valorado, denominándosele "Sociedad del Conocimiento" En este siglo las organizaciones se enfrentan a un sorprendente desafío: tomar en cuenta el valor de los conocimientos, habilidades, relaciones, y características del empleado. Ellos son los que les permiten diferenciarse y construir ventajas competitivas, denominándolo: *capital intelectual* y uno de los retos de las organizaciones es hacer que

este capital se traduzca en factores que produzcan beneficios tangibles. ¿Qué se entiende por capital intelectual? Para Brooking (1997) el capital intelectual "hace referencia a la combinación de activos inmateriales que permite funcionar a la Gestión del Capital intelectual ante el reto de la innovación en la sociedad del conocimiento. Según Edvinsson y Malone (1999), el Capital Intelectual hace referencia al valor resultante del conjunto de intangibles creados por la empresa.

Se define así como un capital intangible por su naturaleza, basado en el conocimiento o en el intelecto humano y desarrollado en la organización. Para Machado (2004), "el capital intelectual es la parte del proceso cognitivo en que la preponderancia la tienen las ideas más que las emociones, las ideas y la forma en que se manifiestan a definiciones y conceptos en sus diferentes grados de estructuración: estrategias, proyectos de calidad, enfoque de procesos" De acuerdo a Edvinsson y Malone (2004) citados arriba en el año 1999 la percepción en su nuevo concepto de capital intelectual se ve fortalecido por el trabajo que han desarrollado durante cinco años definiéndolo ahora así: "es la posesión de conocimientos, experiencia aplicada, tecnología organizacional, relaciones con clientes y destrezas profesionales que dan a la empresa una ventaja competitiva de mercado"

Abeysekera (2006) cita que el capital intelectual es el conocimiento transferido para producir activos de alto valor para incrementar el valor a la organización. Según Rivero (2009), el Capital Intelectual es el efecto de la combinación, es decir, la sinergia de todos los conocimientos que reúne una organización, toda la experiencia acumulada en sus integrantes, sus capacidades, destrezas, su motivación y compromiso, valores, etc., aplicados al trabajo. Todo lo que ha conseguido en términos de relaciones, procesos, descubrimientos, innovaciones, presencia en el mercado e influencia y reconocimiento en la sociedad. El capital intelectual incluye un conjunto de activos como son: los sistemas organizativos, marcas, bases de datos, patentes, relaciones con los clientes, etc. Estos activos, como señala Lev (2001), responden a procesos de creación de valor, de innovación o de base cognitiva de la I+D, de las prácticas y políticas organizativas o de dirección y de la función de las personas como poseedoras de conocimiento, a la vez que es consecuencia de determinada estrategia que pone en acción el conocimiento poseído en la organización Davenport, Prusak (1998).

El expresidente de la empresa Skandia, Bjorn Wolrath, citó que "La medición del Capital Intelectual y un informe bien equilibrado representan un hito importante en el paso de la era industrial a la economía del conocimiento ya que se tiene como resultado una descripción más sistemática de la capacidad y potencial de la compañía para transformar el Capital Intelectual en capital financiero." Edvinsson, Malone (1998) Para Booth (1998), el Capital Intelectual tiene que ver con la habilidad de una empresa para desplegar sus recursos dentro de nuevos mercados, habilidad para transformar nuevas ideas en productos y servicios. "La dificultad real no es la clasificación, identificación y medición del capital intelectual, sino el entender como transferirlo y como el negocio puede usarlo para incrementarlo y más aún como hacer la liga ente la aceleración del mismo con la generación de valor de la empresa." Las organizaciones del conocimiento abarcan tres elementos:

*Capital humano:* Para Chen, Zhu y Xie (2004) es la competencia de los trabajadores, sus conocimientos, habilidades de interrelación y sus valores.

*Capital estructural:* Seetharanam, Bin Zaini, Saravanan (2002) Es la capacidad de desarrollar continuamente todas las capacidades potenciales. Es lo que queda como parte de la empresa luego de que los trabajadores salen de ella como licencias, patentes, marcas, etc

*Capital relacional:* Sveiby (1997) citado por Martin (2004) lo define como la estructura externa que incluye relaciones con clientes y proveedores y abarca marcas, nombres, reputación e imagen de la compañía, es de vital importancia para ella.

Hoy en día los conocimientos o bienes intelectuales son un factor de la producción y se han vuelto tarea sustancial de las organizaciones. Los cambios que se dan en torno a las empresas mexicanas no son temporales, son fuerzas que impulsan a que la competencia se incremente y a que las formas tradicionales de administrar a una empresa se modifiquen, ahora contar con un conjunto de talentos, capacidades, habilidades, destrezas e ideas, o sea, "Capital intelectual" En los años 90 las empresas Mexicanas se han tenido que someter a un contexto más dinámico y competitivo diferente al que enfrentaban años anteriores. "Hoy más que nunca las firmas mexicanas buscan mejorar si posición competitiva y la forma en que lo busca es a través de lo que se conoce como cambio organizacional que puede ser de tres tipos: tecnológico, interno a la empresa y externo a la empresa." Chávez, Mota, Alvarado (1999) En México 25 % de las empresas pueden considerarse flexibles y para ello reúnen dos requisitos: primero, contar con un programa formal de capacitación en el que se desarrollen habilidades y capacidades en el trabajador y segundo que buena parte de las actividades o tareas están descentralizadas, es decir, las realiza el trabajador en la línea de trabajo. Chávez, Mota, Alvarado (1999).

# METODOLOGÍA

Con el objetivo de identificar los diferentes componentes del capital humano, relacional y la tecnológica, así como sus principales dimensiones, según la revisión de la literatura previa se diseñaron una serie de dimensiones y variables de base para la elaboración y recolección de información primaria por medio del cuestionario en una escala Likert 1-5, esta técnica utiliza una categorización continua de las actitudes graduada según la intensidad que debe ser indicada por el sujeto que responde. El cuestionario fue diseñado en 4 apartados, en el primer apartado del cuestionario se solicitan datos generales del ejecutivo a encuestar, se solicita información sobre el Perfil de la Organización, en los apartados siguientes involucran preguntas referentes a el Capital Humano, Capital tecnológico y Capital Relacional. Para identificar la población de estudio se ha seguido el criterio de seleccionar empresas donde los activos intangibles constituyen los activos más importantes, ya que las competencias distintivas de este tipo de empresas se basan en el conocimiento de los trabajadores, los modos de trabajar y las relaciones que mantienen con diversos agentes vinculados al negocio, principalmente clientes.

El estudio se aplicó a empresas Industriales Manufactureras de la Región Sureste del Estado de Coahuila, las cuales constituyeron una población de 760 empresas. El tamaño de muestra calculado fue de 63 empresas. Se considera una investigación social cuantitativa se basa en el paradigma explicativo, utilizando información cuantificable para describir o explicar los fenómenos que estudia, dichos fenómenos son situaciones existentes en la realidad, las cuales han sido provocadas por el investigador. Asimismo, realizamos la recopilación de datos en un solo momento, siendo entonces una investigación transversal. Debido a las características de nuestro estudio, el cuestionario es la herramienta de recopilación de datos más apropiada pues permite obtener información específica para la investigación. Para el procesamiento de los datos se utilizó el software SPSS ver 16.0, y se realizaron los siguientes estadísticos de Distribución de frecuencias en el apartado de perfil ejecutivo y el perfil de la organización, así como un análisis Factorial exploratorio de el Capital Humano, Capital tecnológico y el Capital relacional.

### RESULTADOS

Se realizaron las medias del Perfil ejecutivo y del Perfil de la Organización, donde se concluyó que con respecto al Perfil ejecutivo, la mayoría de los empleados entrevistados son Hombres, con una edad promedio de entre 25 y 45 años de edad, de escolaridad Licenciatura y con antigüedad en la empresa de entre 3 y 10 años. En cuanto al perfil organizacional, se encontró que la mayoría de las empresas sujetas de estudio son de origen extranjero con una antigüedad de entre 11 y 15 años, y tamaño de empresas medianas. En este trabajo de Investigación se presentan los resultados obtenidos del análisis factorial exploratorio para los efectos del capital humano, capital tecnológico y capital relacional, así como su

interpretación. En los resultados preliminares, nos indican falta de capacitación, tecnología adecuada, falta de experiencia en técnicas informáticas, recursos económicos para invertir en I+D, y poco conocimiento de los mercados internacionales.

#### Tabla 1: Perfil Del Ejecutivo

MEDIA
2.57
1.81
1.67
2.24

La mayoría de las personas entrevistadas son del genero masculino, con una edad promedio de 25 a 45 años, y con una escolaridad de licenciatura, y su antigüedad en la empresa con un mínimo de 3 y un máximo de 10 años, en cuanto a su posición dentro de la Empresa se consideran en el nivel medio alto, o sea desde Supervisores hasta Gerente, lo que indica que las empresas de la industriales manufactureras tiene personal joven, pero con pocos años dentro de la empresa.

#### Tabla 2: PERFIL DE LA ORGANIZACIÓN

	MEDIA
Giro de la empresa	1
Origen del capital	1.86
Antigüedad de la empresa	3.14
Tamaño dela empresa	3.48

El giro de las empresas encuestadas son del industrial, y por su ubicación en el norte de México, la mayoría son de origen de capital extranjero teniendo con una antigüedad de 11 a 15 años, la mayoría de ellas son filiales de las grandes trasnacionales que existen en la Región Sureste del Estado de Coahuila, como lo son General Motor y Chrysler, por lo que el tamaño de las empresas estudiadas es mediana.

#### Tabla 3: Extraction Method Principal Capital Humano

P13       1,000         P14       1,000         P15       1,000         P16       1,000         P17       1,000         P18       1,000         P19       1,000	
P14       1,000         P15       1,000         P16       1,000         P17       1,000         P18       1,000         P19       1,000	raction
P15       1,000         P16       1,000         P17       1,000         P18       1,000         P19       1,000	759
P16         1,000           P17         1,000           P18         1,000           P19         1,000	767
P17     1,000       P18     1,000       P19     1,000	734
P18 1,000 P19 1,000	648
P19 1,000	770
	791
P20 1.000	802
1,000	817
P21 1,000	682
P22 1,000	698
P23 1,000	834
P24 1,000	798
P25 1,000	716
P26 1,000	846

Este factor (capital humano) indica que los trabajadores se encuentran debidamente capacitados con lo que respecta a seguridad industrial y ecología y están suficientemente capacitados para realizar su trabajo con eficiencia y además son expertos en sus labores a pesar de que en la empresas de manera general no se promueve su capacitación y las experiencias tanto positivas como negativas son mínimamente consideradas por las empresas para aplicar mejoras en beneficio de sus empleados y de ella..

#### CONCLUSIONES

Resulta necesario desarrollar metodologías que permitan medir y evaluar el conocimiento que crea valor en las organizaciones, si podemos medir el capital intelectual, estaremos en condiciones de evaluar sus antecedentes y consecuentemente su relación con los resultados. Si las empresas desean sobresalir, deben hacer énfasis en el desarrollo y potenciación de sus activos intangibles, ya que existen evidencias de que las empresas que actualmente gozan de ventajas competitivas en el mercado son las que han llevado adelante una eficiente gestión de este activo. De acuerdo con el análisis realizado en este trabajo de investigación, se hace necesario y urgente que las empresas sujetas de estudio desarrollen cambios profundos y a la brevedad en su estilo de gestión, de forma que puedan mejorar su contribución a la sociedad y además, a la formación de capital intelectual que los fortalezca económica y administrativamente.

Tabla 4: Extraction Method Principal Capital Tecnológico

	Communalities	
	Initial	Extraction
P27	1,000	,753
P28	1,000	,871
P29	1,000	,840
P30	1,000	,833
P31	1,000	,794
P32	1,000	,755
P33	1,000	,805

Respecto al factor (capital tecnológico) las empresas han desarrollado su tecnología en fechas recientes (3 años) señalando que han hecho inversión en lo que respecta a investigación y desarrollo y a sus empleados los están involucrando en la gestión del conocimiento lo cual se comprueba con su alto grado de competencia en técnicas informáticas obteniendo como resultado un alto grado de innovación tecnológica.

Tabla 5: Extraction Method Principal Capital Relacional

	Communalit	ies
	Initial	Extraction
P34	1,000	,809
P35	1,000	,654
P36	1,000	,817
P37	1,000	,820
P38	1,000	,817
P39	1,000	,748
P40	1,000	,869
P41	1,000	,796
P42	1,000	,912
P43	1,000	,856
P44	1,000	,814
P45	1,000	,809
P46	1,000	,776

Las relaciones establecidas tanto con sus clientes como con sus proveedores tienden a ser de largo plazo, puesto que se encuentran atentos a las necesidades y deseos de sus clientes, acrecentando día con día su cartera de clientes, debido al grado de satisfacción que sienten hacia el servicio proporcionado por la empresa lo que le brinda una reputación favorable.

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### RESUMEN

Este trabajo se realiza con el fin de mejorar la productividad y competitividad de cadenas de abastecimiento agroindustriales con significativa importancia en la economía del departamento del Magdalena. Dentro de la investigación se analiza la agroindustria de palma de aceite, describiendo las interacciones entre los diferentes eslabones para identificar puntos de mejora dentro de las operaciones logísticas realizadas por las empresas. El punto de vista definido por el investigador fue desde el quehacer de las empresas extractoras debido a que estos agentes gestionan una asociación vertical con plantaciones propias y terceros que hacen mucho más compleja la planeación a nivel estratégico, táctico y operativo. Inicialmente, se realiza el análisis de los componentes de las cadenas de suministro que se representan mediante un modelo conceptual. Una vez culminado lo anterior, se identifica que el proceso de transporte es uno de los que presenta mayor dificultad al momento de cumplir con las programaciones realizadas por las empresas y para ello, se realizaron modelos matemáticos que permitieran obtener una planeación a corto plazo que además incluyera la programación de recursos necesarios para incorporar los requerimientos de infraestructura o equipos necesarios para acoplar elementos de sostenibilidad o logística ambiental en las operaciones logísticas "tradicionales".

PALABRAS CLAVES: Modelación, sector agroindustrial, palma de aceite.

# ABSTRACT

The propose of this work is to help improve productivity and competitiveness of agroindustrial supply chains with significant importance in the economy of the department of Magdalena. The research analyzes the oil palm agribusiness, describing the interactions between the different links to identify areas for improvement of business logistics operations. The view was defined by the researcher from the work of mining companies because these agents manage a vertical partnership with third parties and own plantations that make more complex the strategic, tactical and operational planning. Initially we analyze the components of supply chains that are represented by a conceptual model, identifying the transport process as one that presents greater difficulty meeting time schedules by companies and for this, mathematical models were performed in order to obtain a short-term scheduling that includes the requirements of infrastructure or equipment needed to attach elements of sustainability or environmental logistics in traditional logistics operations.

**JEL**: C44, C61, D24, O13

**KEYWORDS**: Modeling, agroindustrial sector, palm oil.

# LAS CAPACIDADES DE LA EMPRESA PARA PERSONALIZAR SU PRODUCCIÓN Y RECONFIGURARSE DE FORMA INTERNA: ¿INFLUENCIAN SU DESEMPEÑO OPERATIVO Y SU VENTAJA COMPETITIVA PERCIBIDOS?

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#### RESUMEN

Contar con las mejores capacidades permite que las empresas elijan e implementen eficientemente las actividades necesarias para producir y entregar bienes o servicios a sus clientes. Sin embargo, si el propósito es exceder el desempeño de los competidores, es necesario que las empresas desplieguen sus capacidades de forma superior. Este trabajo se enfoca en analizar el impacto de las capacidades operacionales de personalización masiva y de reconfiguración -dimensiones competitivas reconocidas como estratégicas-, ejercen sobre el desempeño operativo percibido de una entidad productiva, y el efecto de éste sobre la ventaja competitiva percibida. El diseño de investigación fue de tipo cuantitativo y la información empírica se examinó en dos etapas: la primera a través de un Análisis Factorial Confirmatorio (AFC), y la segunda mediante un Sistema de Ecuaciones Estructurales basado en Covarianzas (CBSEM). Los resultados confirman que: 1) existe una relación directa, positiva y significativa entre la capacidad de personalización masiva y el desempeño operativo percibido, 2) la capacidad de reconfiguración afecta positiva, directa y significativamente al desempeño operativo percibido, y 3) el desempeño operativo percibido influye de forma directa, positiva y significativa a la ventaja competitiva percibida.

**PALABRAS CLAVE**: capacidad de personalización masiva, capacidad de reconfiguración, desempeño operativo percibido, ventaja competitiva percibida, modelo de ecuaciones estructurales.

# THE COMPANY'S CAPABILITIES TO CUSTOMIZE PRODUCTION AND RECONFIGURED INTERNALLY: DO THEY INFLUENCE PERCEIVED OPERATING PERFORMANCE AND COMPETITIVE ADVANTAGE?

#### ABSTRACT

Having the best capacities allows companies to efficiently choose and implement the necessary activities to produce and deliver goods and services to their clients. Nevertheless, if the purpose is to exceed competitor's performance, it's necessary for companies to deploy their capabilities in a superior manner. This work focuses on analyzing the impact of operational capacities of massive personalization and reconfiguration- competitive dimensions recognized as strategic- exert upon operative development perceived from a productive entity, and the effect of this on perceived competitive advantage. Research design was quantitative and the empirical information was examined in two stages: the first through a confirmatory factorial analysis (CFA) and the second through a system of structural equations based on covariance (SSEBC). Results confirm that: 1)There is a direct, positive and significative relationship between the capacity of massive personalization and perceived operative performance, 2) the reconfiguration capacity affects positively, directly and significantly perceived operative development, and 3) perceived operative development influences perceived competitive advantage in a direct, positive and significative manner.

**JEL:** C38, L29, M10

**KEYWORDS**: Mass Customization Capability, Reconfiguration Capability, Perceived Operational Performance, Perceived Competitive Advantage, Structural Equation Model.

#### INTRODUCCIÓN

La era post-industrial se ha caracterizado por una competencia global creciente, incrementos en la diversidad de los mercados, cambios en los requerimientos de los clientes, en la manufactura avanzada y en las tecnologías de la información; en el centro de dichos cambios se localizan los cada vez mayores, requerimientos individualizados de los clientes (Tu, Vonderembse, & Ragu-Nathan, 2001). Dado que los ambientes turbulentos crean discrepancias entre las capacidades operacionales existentes y las ideales, surge la necesidad de que la empresa reconfigure sus procesos productivos, a la par que mantiene la calidad de los artículos y la productividad del sistema (Pavlou & El Sawy, 2011; Zhang, Vonderembse, & Lim, 2003). Con base en tales antecedentes este trabajo se enfoca en analizar el impacto que las capacidades organizacionales de personalización masiva y de reconfiguración, -dimensiones competitivas reconocidas como estratégicas (Amit & Schoemaker, 1993; Silveira, Borenstein, & Fogliatto, 2001; Tu et al., 2001; Zhang et al., 2003)- tienen sobre el desempeño operativo percibido de una entidad productiva, y el efecto de éste sobre la ventaja competitiva percibida.

## **REVISIÓN DE LITERATURA**

#### **Capacidades**

En esencia, una capacidad organizacional es una rutina o un grupo de rutinas que interactúan (Grant, 1991). Son procesos tangibles o intangibles basados en la información, específicos para cada empresa (Amit & Schoemaker, 1993), y se desarrollan con el paso del tiempo, conforme se dan interacciones complejas entre los recursos de la firma. Para algunos (Day, 1994): a) se trata de dotaciones complejas de habilidades y conocimiento acumulado; b) se ejercen a través de procesos organizacionales; c) facultan a las empresas para coordinar actividades y utilizar sus activos; y d) se manifiestan en actividades típicas del negocio como el desarrollo de nuevos productos, el llenado o requisitado de órdenes, y la entrega de artículos. En resumen, las capacidades son procesos dinámicos, específicos a la empresa y dependientes de su trayectoria; no se encuentran disponibles en el mercado, son difíciles de copiar y se acumulan como resultado de un proceso de aprendizaje continuo (Dávila, 2010).

#### Capacidad De Personalización Masiva

La competencia global ha estimulado que se incorpore la orientación de servicio al cliente dentro del contexto de la manufactura, forzando a los productores tanto a mantener bajos sus precios, como a producir bienes y servicios personalizados (Tu et al., 2001). Este concepto surgió a finales de los años ochenta, y se le considera como una alternativa de diferenciación para las empresas que participan en mercados altamente competitivos y segmentados (Silveira et al., 2001). La capacidad de personalización masiva se describe como un proceso a través del cual se aplican tecnología y métodos administrativos para producir artículos variados y personalizados a través de una respuesta rápida y flexible (Kotha, 1995). Otros (Silveira et al., 2001), indican que se refiere a la habilidad de producir bienes o servicios individualizados, a través de procesos flexibles, en altos volúmenes y a costos razonablemente bajos. La

personalización masiva se basa en la habilidad para simultáneamente dar respuesta a los clientes, lograr eficiencia de costos, y alcanzar altos volúmenes productivos (Tu et al., 2001).

#### Capacidad De Reconfiguración

Para Flynn, Wu y Melnyk (2010), la capacidad de reconfiguración se refiere a las habilidades, procesos y rutinas diferenciadas para llevar a cabo las transformaciones necesarias, a fin de restablecer el ajuste o reconfiguración entre la estrategia operativa y el ambiente del mercado. Indican que a consecuencia de lo anterior, se modifica la configuración de los recursos existentes y se generan nuevas estructuras, buscando la coincidencia con los cambios del entorno. Por su parte Teece et al. (1997), comentan que en ambientes rápidamente cambiantes resulta obvio el valor que se otorga a la habilidad organizacional de identificar las necesidades y reconfigurar los activos de la empresa. En la misma vertiente Swink y Hegarty (1998) señalan que la agilidad es la habilidad de moverse de un estado productivo a otro, con muy pocos costos o penalizaciones, y dicha habilidad involucra la capacidad de producir –con el mismo nivel de eficiencia-amplias variedades de productos individuales y volúmenes agregados.

La reconfiguración ha sido conectada con la apropiación, la oportunidad y la eficiencia, ya que los recursos existentes modifican su configuración en nuevas competencias operativas (Galunic & Rodan, 1998; Kogut & Zander, 1992; Zott, 2003). No obstante que en la literatura se manejan diferentes términos para esta capacidad –reconfiguración, flexibilidad en la mezcla, y agilidad, por citar algunos- éstos convergen alrededor de elementos comunes: la habilidad de la organización para cambiar –en respuesta a los cambios del entorno- su configuración de recursos y producir artículos variados, sin modificar significativamente los costos, y manteniendo un nivel similar de desempeño.

#### Capacidades, Desempeño Operativo Y Ventaja Competitiva

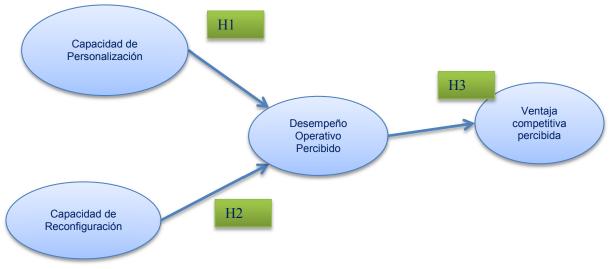
Los recursos se utilizan como insumos para diseñar e implementar estrategias competitivas (Molloy, Chadwick, Ployhart, & Golden, 2011), y en la actividad productiva se requiere que sus diferentes grupos cooperen y se coordinen (Grant, 1991). Los recursos en lo individual no pueden ser fuente de ventaja competitiva (Porter, 1991; Ray, Barney, & Muhanna, 2004), y son pocos los que por sí mismos pueden considerarse productivos (Grant, 1991). Además, el hecho de que una o varias firmas cuenten con recursos similares no garantiza que éstos se utilicen y combinen de forma similar: existe una heterogeneidad de estrategias empresariales derivadas de las distintas combinaciones de recursos y capacidades (Molloy et al., 2011). Por ello, para estar en capacidad de evaluar el potencial de creación de valor de los recursos, es necesario analizar la aportación creada por las estrategias empresariales implementadas con base precisamente en los mismos (Barney & Mackey, 2005).

Con el paso del tiempo, y mediante las decisiones gerenciales deliberadas, las capacidades organizacionales se integran como parte del tejido de la empresa (Grewal & Slotegraaf, 2007; Wu, Melnyk, & Flynn, 2010); el conocimiento acumulado en la organización penetra y se combina en los conglomerados de rutinas que conforman el material genético de la firma (Ethiraj, Kale, Krishnan, & Singh, 2005). Al acumular conocimientos, actualizar las competencias a partir de los conocimientos disponibles, y desplegar dichas competencias a través de estrategias competitivas, las empresas obtienen ventaja competitiva de sus recursos (Ndofor, Sirmon, & He, 2011). Las capacidades organizacionales pueden contribuir a la ventaja competitiva, siempre y cuando sean inmunes a las amenazas de imitación, sustitución, disipación y apropiación presentes en el mercado; en la medida en que éstas sean capaces de lo anterior, serán fuentes de ventaja competitiva perdurable (Collis, 1994; Nath, Nachiappan, & Ramanathan, 2010). El modelo básico conceptual que guía la investigación se presenta en la Figura 1. Para este artículo se plantearon tres hipótesis:

H1: La capacidad de personalización es un predictor del desempeño operativo percibido.

H2: La capacidad de reconfiguración es un predictor del desempeño operativo percibido.H3: El desempeño operativo percibido es un predictor de la ventaja competitiva percibida.





En esta figura se muestra el modelo conceptual que guía la investigación mostrando las relaciones a probar entre los constructos revisados en la literatura. Las hipótesis son: H1: La capacidad de personalización es un predictor del desempeño operativo percibido, H2: La capacidad de reconfiguración es un predictor del desempeño operativo percibido y H3: El desempeño operativo percibido es un predictor de la ventaja competitiva percibida. Fuente: Elaboración propia.

# MÉTODO

Se diseñó una investigación cuantitativa, de naturaleza empírica y de sección transversal. Para contrastar las hipótesis se utilizó un sistema de ecuaciones estructurales basado en covarianzas. El estudio se desarrolló en empresas de las industrias automotriz, cementera, médica, electrónica, y de telecomunicaciones, ubicadas en Ciudad Juárez, Chihuahua, y en la ciudad de Chihuahua, Chihuahua, México. El muestreo fue no probabilístico selectivo, y el perfil de sujetos incluyó gerentes, supervisores, analistas, ingenieros y técnicos. La técnica de recolección de información fue la encuesta, utilizando un cuestionario auto-administrado individual, aplicado durante mayo y junio del 2012. Se recibieron 264 cuestionarios, de los cuales 12 fueron desechados. El total utilizable fue 252 instrumentos. El instrumento incluyó 17 ítems con un formato tipo Likert (1932), con cinco puntos de asignación de respuesta.

Para el análisis estadístico de los datos se siguió el procedimiento de dos etapas recomendado por Anderson y Gerbing (1988): en la primera fase, a fin de evaluar las propiedades psicométricas del modelo de medida, se llevó a cabo un Análisis Factorial Confirmatorio (AFC) de primer orden, y en la segunda, se agregaron las relaciones estructurales propuestas entre las variables latentes, analizándose mediante un Sistema de Ecuaciones Estructurales basado en covarianzas –CBSEM-. Tanto el AFC como el CBSEM se estimaron con apoyo del software estadístico EQS 6.1., utilizándose el Método de Máxima Verosimilitud (ML) con la corrección estadística propuesta por Satorra y Bentler (1994) -estadísticos robustos-, ya que la condición de normalidad multivariante de los datos no fue satisfecha (Coeficiente normalizado de Mardia estimado = 34.0157).

### ANÁLISIS DE RESULTADOS

Los resultados del AFC se presentan en las Tablas 1 y 2. Los distintos estadísticos sugieren que el modelo de medida tiene un buen ajuste, ya que los indicadores cumplen con los criterios de corte convencionales, siendo la excepción el estadístico  $\chi^2$ . Con respecto a dicho estadístico la literatura indica la dificultad implícita de utilizarlo como indicador único de la bondad de ajuste de un modelo SEM, ya que conforme crece el tamaño de muestra o el número de variables observables, sus valores resultantes se consideran de menor significancia (Hair Jr., Black, Babin, Anderson, & Tatham, 2006), e incluso se afirma que conforme el tamaño de muestra se incrementa, las probabilidades de rechazar un modelo también aumentan –sin importar si el modelo es falso o verdadero- (Bagozzi & Yi, 1988).

Variable latente	İtem				Validez	convergente		
			IFC	AVE			Valor t	<b>□</b> s Promedio
Capacidad de personalización	Identificar necesidad del cliente Producción de	0.852	0.868	0.627	e	standarizada 0.810**	(estad.robs) 13.307	0.783
	acuerdo a los deseos					0.902***	13.107	
	del cliente Producción a gran escala					0.838***	13.287	
Capacidad de reconfiguración	Ampliar variedad sin incrementar costos Producción sin grandes cambios	0.862	0.865	0.562		0.580*** 0.709***	8.284 10.003	0.748
reconnguración	Čonstruir en la misma planta y					0.815***	12.194	
	tiempo Manufacturar de forma productiva					0.775***	11.188	
	estable Cambiar combinación					0.750***	11.022	
	productos Cambiar rápidamente la producción					0.692***	8.682	
Desempeño operativo percibido	Cumplimiento especificaciones de calidad	0.864	0.867	0.568		0.670***	8.866	0.751
	Desempeño tiempo entrega					0.687***	10.914	
	Flexibilidad cambio mezcla					0.783***	13.960	
	Flexibilidad cambio volumen					0.835***	15.157	
	Velocidad producción nuevos artículos					0.780***	14.665	
Ventaja competitiva	Crecimiento de las	0.848	0.816	0.597		0.798***	12.863	0.771
	ventas Crecimiento e la					0.714***	10.233	
Indicadores de bonda		<b>BBNFI</b>		BBNNFI	CFI	0.802*** IFI	13.460 MFI	RMSEA
S- $\prod_{p=0.00005}^{f} (113gl) = 181$		0.887		0.944	0.954	0.954	0.873	0.049

Tabla 1: Validez convergente e Indicadores de bondad de ajuste del modelo (AFC).

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001 En esta tabla se presenta la validez convergente y los indicadores de bondad de ajuste, los cuales muestran que en lo general existe un buen ajuste y que los indicadores cumplen con los criterios convencionales. Fuente: Elaboración propia.

Constructo		Capacidad de personalización	Capacidad de reconfiguración	Desempeño operativo percibido	Ventaja competitiva percibida
Capacidad personalización	de	0.627	[0.372-0.620]	[0.431-0.667]	[0.171-0.499]
Capacidad reconfiguración	de	0.246	0.562	[0.452-0.688]	[0.302-0.570]
Desem.operat.percibido	)	0.301	0.325	0.568	[0.528-0.772]
Ventaja comp. perc.		0.112	0.190	0.423	0.597

Tabla 2: Validez discriminante del modelo.

En esta tabla se muestran los valores de los AVE en una de las diagonales, asimismo los intervalos de confianza y, debajo de la diagonal los cuadrados de los coeficientes de correlación entre los factores. Fuente: Elaboración propia.

En lo que a fiabilidad y validez convergente de los indicadores se refiere, los resultados del AFC indican que: 1) todas las relaciones de los ítems con sus factores hipotéticos son significativas, 2) la magnitud de sus cargas estandarizadas son mayores que el valor crítico de 0.50 (Bagozzi & Yi, 1988) y 3) el promedio de las cargas estandarizadas de cada factor fue superior a 0.70 (Hair Jr., Anderson, Tatham, & Black, 1999). De acuerdo al análisis realizado, todos los constructos superan el punto de corte. Con respecto a los índices de consistencia interna, las variables latentes muestran indicadores aceptables, ya que prácticamente todas superan los puntos de corte sugeridos -0.70 para el Alfa de Cronbach, y 0.60 en el caso del índice de fiabilidad compuesta (IFC) (Bagozzi & Yi, 1988).

Con respecto a la validez discriminante, se llevaron a cabo tres pruebas: test de la diferencia entre  $\chi^2$ , test del intervalo de confianza, y test de la varianza extraída. Los resultados de dichas pruebas indican la existencia de validez discriminante, ya que: 1) el test de diferencias de  $\chi^2$  señala que el modelo original planteado es mejor que el modelo alternativo; 2) ninguno de los intervalos de confianza, para  $\pm 2 \lambda$ , comprenden la unidad, y 3) los valores AVE de las variables latentes superan a los cuadrados de los coeficientes de correlación entre factores. A partir de lo anterior puede afirmarse que existe validez discriminante. Finalmente, y de acuerdo a los elementos disponibles para la validación conjunta de los resultados, es posible confirmar la fiabilidad, la validez convergente y la validez discriminante del modelo global de medida. Una vez establecida la fiabilidad y validez del modelo de medida se procedió a realizar la contrastación de las hipótesis a través del SEM correspondiente, empleando también estadísticos robustos (Satorra & Bentler, 1994). Los resultados se presentan, de forma sintética, en la Tabla 3 a continuación.

Tabla 3: Resultados del SEM	para la contrastación de hipótesis
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Hipótesis	Relación estructural propuesta			(	λ estandarizada)	Valor t (robusto)	Resultado
H1	Capacidad de personaliz	ación 🗲 Desempeñ	io Operativo Pere	cibido	0.341***	4.379	No rechazada
$H_2$	Capacidad de reconfigur	ración <b>→</b> Desempei	ño Operativo Per	cibido	0.409***	4.288	No rechazada
$H_3$	Desempeño Operativo Percibido 🗲 Ventaja Competitiva Percibida			rcibida	0.645***	7.928	No rechazada
Indicadores de b	ondad de ajuste:	BBNFI	BBNNFI	CFI	IFI	MFI	RMSEA
S-B $\chi^2$ (115 gl) = n=0 00014	= 178.2462	0.892	0.951	0.958	0.959	0.882	0.047

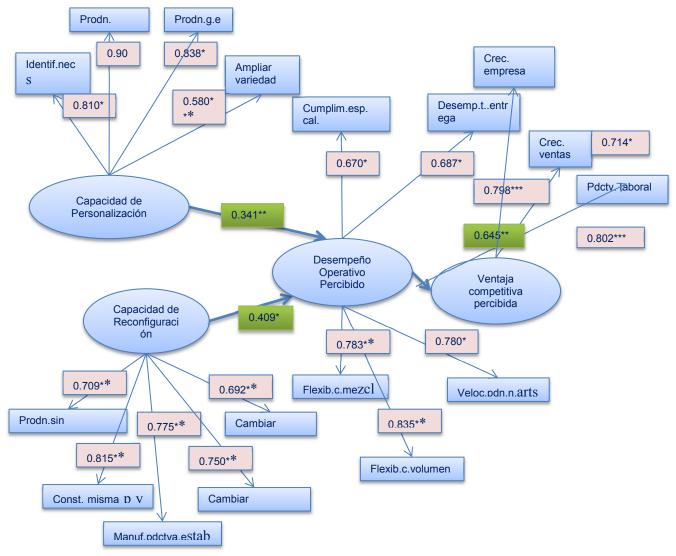
\*<0.05, \*\*p<0.01, \*\*\*p<0.001 Esta tabla muestra que no fue posible rechazar las tres hipótesis a probar, es decir todas las relaciones planteadas en el modelo estructural fueron significativas con un nivel p<0.001. Prácticamente todos los indicadores de bondad de ajuste BBNFI, BBNNFI, CFI, IFI y MFI cubren el punto de corte del 0.90, mientras que los residuales (RMSEA) son pequeños, por lo que puede concluirse que la bondad de ajuste del modelo es adecuada. Fuente: Elaboración propia.

Como puede apreciarse, los estadísticos de bondad de ajuste del modelo estructural muestran un buen ajuste global: BBNFI=0.892; BBNNFI=0.951; CFI=0.958; IFI=0.959; MFI= 0.882 y RMSEA=0.047. Las tres hipótesis planteadas resultaron significativas a un nivel p < 0.001.

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En la Figura 2 se presenta el modelo final contrastado, en el cual se incluyen los ítems de cada factor y sus respectivas cargas estandarizadas. Asimismo, se muestra gráficamente el valor de los *paths* estructurales estandarizados de las relaciones planteadas.

Figura 2: Modelo contrastado



En esta figura describe el modelo contrastado. Los estadísticos de bondad de ajuste del modelo estructural muestran un buen ajuste global a través del BBNFI, BBNNFI, CFI, IFI, MFI y RMSEA. Las tres hipótesis planteadas resultaron significativas a un nivel de p<0.001. Fuente: Elaboración propia.

De acuerdo a la figura anterior, los resultados muestran que las tres relaciones planteadas entre los constructos del modelo son estadísticamente significativas. Tanto la *Capacidad de personalización* como la *Capacidad de Reconfiguración* influyen directa y significativamente sobre la *Desempeño Operativo Percibido*. De forma comparativa, la *Capacidad de Reconfiguración* ejerce una influencia ligeramente superior que la *Capacidad de Personalización*. En el caso de la relación entre la *Capacidad de Personalización* y el Desempeño Operativo Percibido, los resultados muestran una influencia directa, positiva y significativa con un valor path 0.341 (valor t=4.379) nivel p<0.001; para la relación entre la *Capacidad de Reconfiguración y el Desempeño Operativo Percibido*, los valores resultantes son similares e indican un valor path 0.409 (valor t=4.288) con un nivel p<0.001. Por su parte el *Desempeño* 

*Operativo Percibido* influencia directa, positiva y significativamente a la *Ventaja Competitiva Percibida*, mostrando un valor *path* de 0.645 (t=7.928), también con un nivel p < 0.001.

## **DISCUSIÓN Y CONCLUSIONES**

No obstante que los académicos de la administración reconocen la importancia de las capacidades manufactureras para lograr ventajas competitivas, es raro que en sus trabajos se investiguen las capacidades a nivel de la planta, que es precisamente donde se utilizan (Peng et al., 2008). También indican que pocos estudios en la gestión de las operaciones conceptualizan y miden las capacidades de manufactura, y en consecuencia el grupo subyacente de rutinas que deriva en éstas, se encuentra subdesarrollado. La manufactura puede contribuir en el logro de la competitividad, creando una ventaja cuyas bases se localicen en hacer mejor las cosas, en tiempo y de forma correcta, rápida, económica y flexible (Slack, 1991); lo anterior tiene un claro impacto en las estrategias de operación en general, y es un buen punto de partida en la consideración de las prioridades competitivas. Además, la aplicación de la estrategia en la manufactura contribuye tanto al desempeño operacional (Meredith & Vineyard, 1993) como a la estrategia empresarial (Brown & Blackmond, 2005).

Con base en los resultados obtenidos en este trabajo, fue posible confirmar las relaciones teóricas propuestas. La investigación empírica desarrollada evidencia que tanto la capacidad de personalización como la de reconfiguración, inciden sobre el desempeño de las operaciones de la empresa y que mediadas por éste influyen a la ventaja competitiva percibida de la firma. Los recursos y capacidades se despliegan en las organizaciones a través de procesos. En el caso de la personalización masiva, se alcanza a través de la habilidad para traducir necesidades del cliente en productos y servicios diferenciados, a través de procesos de operación y tecnologías flexibles bajo el reto de mantener los costos controlados. El grado de libertad de los clientes en la especificación de las características del producto, afecta en gran medida la configuración de los suministros, la producción, la red de distribución, la arquitectura del producto y el desempeño de la organización (Salvador, Rungtusanatham, & Forza, 2004). Por otro lado, en lo relativo a la capacidad de reconfiguración se requiere de flexibilización y agilidad para reconfigurar capacidades, competencias y procesos operativos existentes, a fin de lograr un alto desempeño y con ello fortalecer la posición competitiva de la firma. En este sentido, las organizaciones tienen que estar dispuestas a renunciar a lo antiguo para permitir que la reconfiguración fortalezca el enfoque estratégico, tanto en la gestión como en el desarrollo de las relaciones de la cadena de suministro.

Resulta imposible definir una capacidad sin hacer referencia al desempeño, ya que ésta faculta para desarrollar una actividad de forma repetida y confiable; por tanto, un atributo particularmente importante en ella, es precisamente su grado de confiabilidad y replicabilidad, ya que de otra forma la empresa no podría afirmar que puede hacer o llevar a cabo una tarea determinada (Helfat & Winter, 2011). La comprensión de las relaciones existentes entre los recursos y las acciones, fortalece el entendimiento del porqué algunas empresas logran altos desempeños (Ndofor et al., 2011). Los resultados de este trabajo confirman que las capacidades de personalización masiva y reconfiguración impactan la variabilidad del desempeño operativo, y es precisamente por ese motivo que deben desarrollarse en los procesos organizacionales de la industria maquiladora de exportación. Sin embargo, si el propósito es exceder el desempeño de los competidores, es necesario que dichas capacidades se desplieguen de forma superior (Day, 1994) a fin de generar una ventaja competitiva. En este trabajo se analizó el impacto de dos capacidades operacionales reconocidas como estratégicas, sobre el desempeño operativo y la ventaja competitiva percibidos. Sin embargo, estudios futuros pueden entrelazar el desempeño de estas capacidades con otras, buscando comprender el impacto integral de éstas en conjunto sobre el desempeño, con el objeto de crear las barreras necesarias para mantener la ventaja competitiva de la organización.

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# ANALISIS COMPARATIVO DE LA PRODUCTIVIDAD Y RENTABILIDAD DE LAS ZONAS INDUSTRIALES FRANCA Y MAMONAL, COMO RESULTADO DE LA CERTIFICACION ISO: 9001 EN COLOMBIA

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## RESUMEN

El presente artículo de investigación muestra los resultados obtenidos en el desarrollo del proyecto del análisis comparativo de la productividad y rentabilidad de las zonas industriales Franca y Mamonal como resultado de la certificación ISO: 9001 en Colombia. En la metodología utilizada se realizó una descripción detallada de los sistemas de gestión de calidad, indicadores de productividad y financieros al grupo de 25 empresas certificadas en calidad para los periodos 2006 y 2010 de los sectores industriales objeto de estudio. Seguidamente, se utilizó la técnica de análisis multivariante de datos, aplicando el método de clasificación y segmentación a través de análisis discriminante, que permitió explicar la pertenencia y discriminación de cada grupo de indicadores de productividad y financieros, que mejor discriminan en la funciones objetivos, obteniendo como resultado en el análisis comparativo de zonas Franca y Mamonal, que las empresas certificadas en calidad , inciden positivamente en el índices productividad y rentabilidad, razón utilidad bruta/valor agregado (IP1), margen bruto (MB) y Margen operacional (MO), respectivamente, en las empresas de las zonas objeto de estudio.

PALABRAS CLAVE: Productividad, Rentabilidad, Certificación, Análisis Discriminante,

#### ABSTRACT

This research paper presents the results of the project in the development of the comparative analysis of the productivity and profitability of industrial zones Franca and Mamonal as a result of the ISO: 9001 in Colombia. The methodology used was a detailed description of the quality management systems, productivity and financial indicators of the group of 25 companies certified in quality for the periods 2006 and 2010 industrial sectors studied. Next, we used multivariate analysis technique of data, using the method of classification and segmentation by discriminant analysis, which allowed discrimination explain membership and each group productivity and financial indicators that best discriminate on objective functions, resulting in the comparative analysis of Franca and Mamonal areas, that certified companies in quality, positive impact on the productivity and profitability ratios, value added/ gross profit ratio (IP1), gross margin (MB) and operating margin (OM), respectively in the companies studied areas.

JEL: C1L6

KEY WORDS: Productivity, Profit, Certification, Discriminant Analisys.

# INTRODUCCIÓN

Dada la importancia de la productividad para el incremento de la eficiencia y eficacia en las empresas, en el presente artículo de investigación se analiza la productividad y rentabilidad de las zonas Franca y Mamonal como resultado de la certificación en ISO: 9001.

Así mismo, se presentan la definición y conceptualización de los sistemas de gestión de calidad, las razones financieras y de productividad, los criterios para evaluar la incidencia de los sistemas de gestión de calidad, y la incidencia de éstos, en la productividad y el rendimiento financiero de las empresas de sector Industrial. Para evaluar el impacto de la certificación en calidad en los indicadores de productividad y la utilidad financiera, se desarrolló una metodología para el análisis de los datos, tomando para éste estudio aquellas empresas certificadas que presentaron sus estados financieros en la Superintendencia de Sociedades, para los periodos 2006 y 2010. Para la evaluación de los índices de productividad y financieros de las empresas del sector Industrial, se utilizó la técnica Multivariada del Análisis Discriminante (MDA), Finalmente, se presentan los resultados de la evaluación del impacto de la certificación en calidad y su incidencia en la productividad y utilidad financiera, y la verificación de supuestos a partir de las pruebas Saphiro & wilk y de Box, para la comprobación de normalidad e igualdad de matrices varianza-covarianza respectivamente, de las variables objeto de estudio.

#### **REVISION LITERARIA**

#### Análisis Económico Cartagena.

Una de las principales actividades económicas de Cartagena es la industria, la cual aporta aproximadamente 38% de la producción total de la ciudad y genera un 10% del total de puestos de trabajo (Arenas, 2009). La Encuesta Anual Manufacturera 2009 realizada por el DANE (2011), muestra que la ciudad generó 46.07% de la producción industrial, 40.54% del valor agregado y 23.35% del empleo que generó el sector industrial del Caribe colombiano, cifras que reflejan la relevancia de este sector a nivel regional. A nivel nacional, Cartagena es la cuarta ciudad de mayor producción industrial de Colombia, aportando el 6.7% de lo producido por la industria del país, en 2010 (Departamento Administrativo Nacional de Estadisticas, 2011). Su industria se caracteriza por ser altamente exportadora, especializada en los sectores petroquímico, químico y plástico; situación que ha llevado a que grandes multinacionales tengan su centro de producción y distribución en la ciudad, convirtiéndola en el principal fabricante de colombia después del Complejo Petrolero de Barrancabermeja (Arenas, 2009). Gran parte de la producción industrial de Cartagena se concentra en el complejo industrial de Mamonal, reconocida como la zona de desarrollo industrial y manufacturero más importante del Caribe colombiano (Pérez, 2005).

### Análisis Económico Barranquilla.

La Zona Franca (área aduanera con régimen tributario especial) de Barranquilla constituye uno de las áreas geográficas de mayor desarrollo para la fabricación de bienes y prestación de servicios de la región, para el periodo enero-junio de 2010 movilizó cerca de 467.392 toneladas, reduciendo el valor total en un 5%, en donde el Territorio Aduanero Nacional (Colombia) sigue representando la mayoría de la mercancía total movilizada, con una participación del 63%. A pesar de lo anterior, Colombia muestra una disminución del 7% respecto al mismo periodo del 2009 (Cámara Comercio Barranquilla, 2010). Para este mismo año, Las exportaciones no tradicionales del departamento del Atlántico, decrecieron 3,6% y las importaciones se incrementaron 9,6%, esto debido principalmente a las ventas y compras externas del sector industrial, siendo Estados Unidos el principal país de exportación y de origen de las importaciones.

#### Análisis Productividad

De acuerdo con Berechet, Huerta, & San Miguel (2006), del Centro para la Competitividad de Navarra, señalan que el desarrollo económico de una organización o nación, y el bienestar de los individuos que la componen depende en gran medida de la capacidad de la misma, para incrementar su productividad, además de ser éste, el concepto más apropiado para la definición de competitividad.

En este sentido, la productividad permite fijar una relación entre la cantidad de bienes y servicios producidos y la cantidad de recursos utilizados (Instituto Nacional de Estadística, Geografía e Informática, 2003), transformándose en un factor crucial para la determinación del eficiente uso de los recursos

#### Indicadores Financieros.

Las razones o indicadores financieros son el producto de establecer resultados numéricos basados en relacionar dos cifras o cuentas bien sea del Balance General y/o del Estado de Pérdidas y Ganancias. Los resultados así obtenidos por si solos no tienen mayor significado; sólo cuando los relacionamos unos con otros y los comparamos con los de años anteriores o con los de empresas del mismo sector y a su vez el analista se preocupa por conocer a fondo la operación de la compañía, podemos obtener resultados más significativos y sacar conclusiones sobre la real situación financiera de una empresa, que en nuestro objeto de estudio son las empresas de la Zona industrial de Mamonal, (Vásquez, Guerra & Ahmed (2008). Certificación ISO 9000, la productividad y el desempeño financiero en las organizaciones

Evidencia empírica sugiere que las empresas pueden obtener beneficios internos como mejoramientos en la calidad y en la productividad de sus procesos, además de lograr un mejor desempeño financiero, mantener o ampliar su sector de mercado y en general incrementar su valor, gracias a la implementación de iniciativas de gestión de calidad como Total Quality Management (TQM), el Just-in-time Sistems (JIT) o las normas de la serie ISO 9000 de sistemas de gestión de calidad (Corbett, Kirsch, & Montes-Sancho, 2005; Casadesús, Giménez, & Heras, 2001; Naveh & Marcus, 2004). Así mismo, Elmuti and Kathawala (1997) refiriéndose específicamente a la consecución de la certificación en ISO 9001 "Sistemas de la calidad. Un modelo de garantía de calidad para el diseño, el desarrollo, la producción, la instalación y los servicios"; que junto con la ISO 9002 son las únicas que prevén certificación del conjunto de normas de la serie ISO 9000 (Van Den Berghe, 1998); afirman que la aplicación de esta incrementa la productividad gracias al mejoramiento de la moral de los empleados.

### METODOLOGÍA

Este artículo de investigación se enmarca dentro del tipo de investigación descriptivo y cuantitativo, basada en la técnica estadística de Análisis Discriminante Multivariado (DMA), para comparar en los dos periodos de análisis (años 2006 y 2010), la incidencia de la productividad en la rentabilidad para cada una de las zonas (Franca y Mamonal) de evaluación en Colombia. Para la realización de esta investigación, se utilizaron los indicadores de productividad y utilidad financiera tanto para la zona Franca, como para la zona Mamonal presentados a continuación, para hallar la estimación de los años evaluados, como se muestra en la tabla 1.

Variable	Indicadores Financieros y de Productividad	
MB	Margen bruto	
МО	Margen operacional	
MN	Margen neto	
IP1	Razón utilidad bruta/valor agregado	
IP2	Razón utilidad operacional/valor agregado	
IP3	Razón utilidad neta/valor agregado	
IP4	Productividad del capital	
IP5	Razón utilidad operativa/capital de trabajo	
IP6	Razón utilidad neta/capital de trabajo	

Tabla 1:Variables e indicadores utilizados para realizar el análisis de discriminante.

Esta tabla muestra la relación de variables e indicadores para realizar la evaluación de los indicadores de productividad y su incidencia en la utilidad financiera de las empresas certificadas en Zona Franca y Mamonal en Colombia. Fuente: Autores.

#### RESULTADOS

Para el análisis comparativo de la productividad y rentabilidad en las zonas industriales de analisis, se utilizaron todas las variables seleccionadas, margen bruto (MB), margen operacional (MO), margen neto (MN), razón utilidad bruta/valor agregado (IP1), razón utilidad operacional/valor agregado(IP2), razón utilidad neta/valor agregado (IP3), productividad del capital (IP4), razón utilidad operativa/capital de trabajo (IP5) y razón utilidad neta/capital de trabajo (IP6), siendo las variables que mejor discriminan los indicadores de productividad y financieros de las empresas certificadas de zona Franca y Mamonal, el MB, MO, MN, IP1, IP2, IP3, IP4, IP5 e IP6, constituyendo éstas funciones discriminantes, el resultado final del modelo que se muestra en las tablas 2 y 3 y las ecuaciones (1), (2) y (3), (4) de zonas Franca y Mamonal, respectivamente, los cuales muestran los indicadores que discriminan y la variabilidad del modelo.

Tabla 2: Coeficiente de la función de clasificación zona Franca-Barranquilla

	Año	
	2006	2010
MB	33,316	6,436
MO	134,080	7,241
MN	-228,332	1,171
IP1	-23,179	3,338
IP2	-25,087	157,916
IP3	189,938	-101,288
IP4	11,513	12,753
IP5	-116,673	-145,050
IP6	51,380	73,478
(Constante)	-9,300	-9,792

Esta tabla muestra los coeficientes de clasificación para el año 2006 y 2010.

Tabla 3: Coeficiente de la función de clasificación zona Mamonal-Cartagena

	Añ	0
	2006	2010
MB	79,279	70,541
MO	-45,868	-45,370
MN	9,478	-19,288
IP1	-41,162	-33,508
IP2	-24,235	-10,102
IP3	-14,755	-2,878
IP4	4,732	4,085
IP5	53,231	36,641
IP6	-38,020	-16,629
(Constante)	-9,717	-7,602

Esta tabla muestra los coeficientes de clasificación para el año 2006 y 2010.

Con base en los resultados de la tabla 2 y 3, se procedió a calcular la función discriminante de las empresas certificadas de zona Franca y Mamonal.

 $Z franca_{2006} = MB (33,316) + MO (134,080) - MN (228,332) - IP1 (23,179) - IP2 (25,087) + IP3 (189,938) + IP4 (11,513) - IP5 (116,673) + IP6 (51,380) - 9,30.$ (1)

 $Z franca_{2010} = MB (6,436) + MO (7,241) + MN (1,171) + IP1 (3,338) + IP2 (157,916) - IP3 (101,288) + IP4 (12,753) - IP5 (145,050). IP6 (73,478) - 9,792.$ (2)

 $Zmamonal_{2006} = MB (79,279) + MO (-45,868) + MN (9,487) + IP1 (-41,162) + IP2 (-24,235) + IP3 (-14,755) + IP4 (4,732) + IP5 (53,231) + IP6 (-38,020) - 9,717$ (3)

 $Zmamonal_{2010} = MB (70,541) + MO (-45,370) + MN (-19,288) + IP1 (-33,508) + IP2 (-10,102) + IP3 (-2,878) + IP4 (4,085) + IP5 (36,641). IP6 (-16,629) - 7,602$ (4)

En relación con los resultados de los modelos, se tiene que la capacidad de clasificación del modelo fue muy buena, tanto para las empresas de zona Franca, como Mamonal, generando como resultado un error Tipo I 81,8 % y error Tipo II de 81,8 % con una efectividad de clasificación buena de 81,8 %, y un error Tipo I de 24% y un error Tipo II de 20% para una efectividad de clasificación de 78%, respectivamente, como se muestra en las tablas 4 y 5.

Tabla 4: Resultados de la clasificación zona Franca-Barranquilla

		Grupo de pertenencia pronosticado			
		Año	2006	2010	Total
Original	Recuento	2006	9	2	25
		2010	2	9	25
	%	2006	81.8	18.2	100,0
		2010	18,2	81,8	100,0

Esta tabla muestra el resultado de la clasificación del modelo para los años 2006 y 2010.

Tabla 5: Resultados de la clasificación clasificación zona Mamonal-Cartagena

		Grupo de pertenencia pronosticado			
		Año	2006	2010	Total
Original	Recuento	2006	19	6	25
		2010	5	20	2:
	%	2006	76,0	24,0	100.0
		2010	20,0	80,0	100,0

Esta tabla muestra el resultado de la clasificación del modelo para los años 2006 y 2010.

Evaluación De Los Indicadores De Productividad Y Utilidad Financieras En Las Empresas Certificadas En ISO:9001 En Zonas Franca Y Mamonal En Colombia.

Con base en los resultados obtenidos, se analizan los estadísticos descriptivos como la Media y Desviación Típica, de los indicadores seleccionados de las empresas de zonas Franca y Mamonal, encontrando que existe una correlación de impacto e incidencia, entre la certificación en calidad y los indicadores de productividad, y estos últimos, a su vez inciden positivamente en los indicadores de utilidad financiera, como se observa en las variaciones crecientes de un periodo (2006) a otro (2010), en los indicadores, razón utilidad bruta/valor agregado (IP1), para zona Franca e igualmente en los indicadores, razón utilidad bruta/valor agregado (IP1), razón utilidad operacional/valor agregado(IP2), margen bruto (MB) y margen operacional (MO), para zona Mamonal, como se muestra en las tabla 6 y 7.

Tabla 6: Medias de los indicadores de productividad y utilidad financiera de zona Franca-Barranquilla.

Año	Indicador	Media	Desviación típica
	MB	,3886	,27599
	MO	,109	,06626
	MN	,0704	,0489
	IP1	,3297	,2497
	IP2	,09	,05104
2006	IP3	,0572	,03852
	IP4	2,5338	2,95088
	IP5	,2746	,37066
	IP6	,1483	,22062
	MB	,3792	,27769
	MO	,0625	,10898
	MN	,0235	,13469
	IP1	,3727	,29214
	IP2	,0575	,09144
	IP3	,0208	,11479
	IP4	1,0663	,53652
2010	IP5	,0615	,12066
	IP6	.0326	,13223

Esta tabla muestra el resultado de las medias de los indicadores de productividad y utilidad financiera para los años 2006 y 2010.

Tabla 7: Medias de los indicadores de productividad y utilidad financiera de zona Mamonal-Cartagena.

Año	Indicador	Media	Desviación típica
	MB	,1379	,31874
	MO	-,0281	,35716
	MN	,0302	,08273
	IP1	,1270	,31692
	IP2	,0000	,00000
2006	IP3	,0000	,00000,
	IP4	1,8742	,95250
	IP5	,0439	,15544
	IP6	,0115	,14113
	MB	,1727	,13832
	MO	,0041	,11696
	MN	-,0084	,11512
	IP1	,1729	,14981
	IP2	,0040	,10988
	IP3	-,0142	,12493
	IP4	1,6688	,99145
2010	IP5	,0176	,19479
	IP6	0002	17596

Esta tabla muestra el resultado de las medias de los indicadores de productividad y utilidad financiera para los años 2006 y 2010.

## CONCLUSIONES

Realizar el análisis comparativo de productividad y rentabilidad en las empresas certificadas en ISO: 9001 de zonas Franca y Mamonal en Colombia, permite la identificación de las variables que mayor incidencia tienen en la eficiencia de operativa y financiera de las organizaciones estudiadas. En este artículo, se elaboró un modelo para la evaluación de los indicadores financieros utilizando el Análisis Discriminante para las empresas de las zonas Franca y Mamonal.

En el Análisis Discriminante desarrollado en este artículo para la construcción del modelo se utilizaron 25 empresas de las zonas industriales de análisis, presentando los modelos buenas efectividades en las clasificaciones para cada zona correspondiente. En las muestras originales la precisión del modelo presentó para la zona Franca en año 2006 (81.8%) y para año 2010 (81.8%), con un promedio total de clasificación de 81.8%, y para la zona Mamomal en año 2006 (76%) y para año 2010 (80%), para un promedio total de clasificación de 78% de las empresas. Lo que demuestra la alta confiabilidad para predecir el comportamiento de los indicadores de productividad y utilidad financiera en el sector en el largo plazo.De las funciones discriminantes obtenida y de los estadísticos analizados. Se observó una buena predicción de los modelos; como resultado del análisis de la función discriminante y los estadísticos utilizados, se puede concluir que la certificación en calidad de las empresas del sector de Mamonal, incide positivamente en los índices de productividad, razón utilidad bruta/valor agregado (IP1), razón utilidad operacional/valor agregado(IP2) y estos últimos, a su vez, también inciden positivamente en las utilidades financieras margen bruto (MB) y margen operacional (MO).

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# COMPETITIVIDAD DE LAS MICROEMPRESAS EN CUENCA ECUADOR

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### RESUMEN

Cuenca, la tercera del Ecuador, Patrimonio Cultural de la Humanidad, calificada por la Asamblea Nacional como Ciudad Universitaria, elegida como una de las diez mejores ciudades para vivir en el mundo, cuenta con la mayor densidad de unidades productivas en el país; su gran mayoría son pequeños negocios, dichas unidades son las microempresas; sin embargo, dadas sus características, no generan los ingresos suficientes para constituirse en un aporte real para la economía de la región. Su limitada competitividad les ha impedido crecer; factores internos de su propia operación, como su débil gestión administrativa, problemas con el mercado, producción y financiamiento, así como factores del entorno, como la inseguridad y el clima político, constituyen elementos que dificultan su gestión. La presente investigación busca realizar un diagnóstico de sus áreas funcionales que posibiliten establecer estrategias de crecimiento a corto, mediano y largo plazo.

PALABRAS CLAVE: Cuenca, micro, pequeñas, medianas, empresas.

# COMPETITIVENESS OF MICROENTERPRISES IN CUENCA, ECUADOR

#### ABSTRACT

Cuenca, the third most important city in Ecuador, World heritage trust site, described by the National Assembly as University City; chosen as one of the ten best cities to live in the world; has the highest density of production units in the country; most of them being small businesses, these units are microenterprises, however due to their characteristics they do not generate enough profit in order to become a real contribution to the economy of the region, its limited competitiveness has kept them from growing; internal factors of its own operations such as its weak administrative management, market problems, production and financing; as well as some environmental factors like insecurity, and the political climate are factors which hinder its management. This research seeks to diagnose its functional areas which will enable to establish growth strategies in the short, medium and long term.

**JEL:** L26

**KEYWORDS:** Cuenca, micro, small, medium, enterprices

# INTRODUCCIÓN

La micro, pequeña y mediana empresa han tenido un impacto significativo en el desarrollo económico del Ecuador, es por ello que las microfinanzas conforman un sector reconocido por instituciones nacionales y organismos internacionales. La división de inteligencia de negocios (Economist Intelligence Unit), del Economist Group, empresa responsable de la publicación de la revista The Economist, en el estudio denominado "Microscopio global sobre el entorno de negocios para las microfinanzas 2011"(Unit Economist Intelligence, 2011), sitúa al Ecuador en el octavo puesto a nivel mundial.Sin embargo de la ubicación que tiene el país en el ámbito de las microfinanzas y a pesar de la importante presencia de las pequeñas unidades productivas, debemos considerar que la economía ecuatoriana es altamente concentrada, lo cual se ratifica con información del último censo económico realizado por el Instituto

Nacional de Estadística y Censos (INEC), en donde se destaca que el 1% de establecimientos comerciales concentra el 90% de la economía y el 92% del valor agregado del país. (Diario El Telégrafo, 2011).

A pesar de la concentración de la riqueza, Ecuador es un país emprendedor por excelencia; de acuerdo con datos del último censo económico de 2010, en el país existen 500.217 unidades productivas, en su mayoría pequeños emprendimientos que dan empleo a más de dos millones de ecuatorianos y generan ingresos por cerca de 146.000 millones de dólares. (Censos, 2010) Bajo estos parámetros, el Ecuador es uno de los países de Latinoamérica que registra una de las mayores densidades en cuanto al número de establecimientos: 381 por cada 10.000 habitantes, México lidera la clasificación con 458; detrás del número de emprendimientos ecuatorianos están Colombia con 350 y Perú con 319. (Diario El Universo, 2011) A nivel nacional, Cuenca es la ciudad ecuatoriana que cuenta con la mayor densidad de establecimientos, índice que llega a 538 por cada 10.000 habitantes, mayor al promedio que se registra en el país (INEC, www.inec.gob.ec, 2010), en donde la influencia de las microempresas es relevante, estas cubren el 94,9% del total de las unidades productivas; es decir, los talleres que cuentan con un estrato de 1 a 9 trabajadores, contribuyen con la generación del 44,2% de las plazas de trabajo y el 23,8% de los ingresos generados en la localidad, (Tobar, 2012) por lo tanto, es importante realizar un estudio sobre su competitividad.

#### **REVISIÓN DE LITERATURA**

No existe una clasificación universal sobre las microempresas, sus concepciones varían de un país a otro, incluso dentro de un mismo Estado existen diferentes criterios, como el número de trabajadores, volumen de ventas, volumen de activos, entre otros. La Unión Europea clasifica como microempresa a toda unidad económica con menos de diez trabajadores, así como aquellas que tienen un nivel de ventas anuales menor a dos millones de euros. En los Estados Unidos, la entidad Micro Enterprise Works considera microempresas a aquellas con menos de cinco trabajadores. A nivel centroamericano, el criterio más utilizado en la definición de micro y pequeña empresa es el número de trabajadores; en esta región existe consenso para considerar a toda empresa con menos de diez trabajadores como microempresa.(Gutierrez, 2009). En el caso ecuatoriano, también existe cierta ambigüedad al respecto, citemos algunas fuentes:

#### Plan Nacional de Desarrollo 2007-2010

De acuerdo con lo señalado en el Plan Nacional de Desarrollo, preparado por la Comunidad Andina de Naciones, las empresas se clasifican considerando las siguientes variables: el número de empleados efectivos, el valor bruto de las ventas anuales y el valor de los activos totales. (Presidencia de la República, 2007), conforme se detalla a continuación.

Tabla 1: Clasificación de las micro, pequeñas, medianas y grandes empresas por el número de empleados, valor bruto en ventas anuales y valor de sus activos totales

Clasificación	Micro	Pequeñas	Medianas	Grandes
Número	1 – 9	Hasta 49	50 - 199	Mayor a 200
Ventas anuales	100.000	1'000.000	1'000.001 - 5'000.000	Mayor a 5'000.000
Activos totales	Menor a 100.000	100.001 - 750.000	750.001 -4'000.000	Mayor a 4'000.000

Fuente: Proyecto de Ley PYMES y Proyecto de Estatuto Andino para las MIPYMES Elaborado por: el autor

Superintendencia De Compañías Del Ecuador

Desde enero de 2011, las nuevas regulaciones de la Superintendencia de Compañías señalan que para efectos del registro y preparación de estados financieros, se califica como PYMES a las personas jurídicas que tengan activos inferiores a cuatro millones de dólares, registren un valor bruto de ventas anuales

inferior a cinco millones de dólares y tengan menos de 200 trabajadores; pero, no se establece una división clara entre micro, pequeñas y medianas empresas.(Compañías, 2010)

#### Reglamento Del Código De La Producción

El Reglamento del Código de la Producción define como actores de la economía social y solidaria a los microempresarios, pequeños y medianos empresarios, de manera similar al Plan de Desarrollo, a excepción del valor de los activos totales, sobre los que no se hace referencia. (Productividad, 2010) Además, en nuestro aparato productivo se identifica al sector denominado "artesanía", que abarca a quienes se dedican, en forma individual o como asociaciones, cooperativas, gremios y uniones artesanales, a la producción de bienes o servicios y que transforman la materia prima con predominio de la labor manual, con o sin auxilio de máquinas, equipos y herramientas, siempre que no sobrepasen en sus activos fijos -excluyéndose los terrenos y edificios- el monto de 360 salarios mínimos vitales generales. (Registro Oficial N.466, 1986) En nuestra investigación consideramos la clasificación del Plan Nacional de Desarrollo y analizaremos exclusivamente a las microempresas.

# METODOLOGÍA

Para efectos de esta investigación, se aplicó una encuesta con 44 preguntas cerradas (Hernández Sampieri, Fernández Collado, & Baptista Lucio, 2010), durante julio de 2011, en la ciudad de Cuenca. El instrumento fue aplicado a 342 microempresarios, con un nivel de confianza del 95%, con un error estimado del 5%, la muestra fue estratificada y clasificada por sectores y/o actividades. La información fue introducida en una base de datos, para posteriormente ser trabajada en el programa estadístico SPSS 19. Los resultados de la aplicación de la encuesta se clasificaron en cinco partes, cuatro de las cuales corresponden a las áreas funcionales de las organizaciones: administración, finanzas, mercado y producción, y uno referido al análisis del entorno en el que se desenvuelven las microempresas. Para cada ámbito se estableció un porcentaje similar de reactivos, respuestas a las que se establecieron ponderaciones en función del resultado de cada una de ellas, de 1 a 5 (1 la posición más crítica y 5 la posición ideal). Considerando que el 95% de la población encuestada estuvo conformado por los propietarios de los talleres, se aseguró la confiabilidad de la información recogida y consecuentemente los resultados obtenidos.

#### RESULTADOS

En general, el resultado global del análisis de la gestión de las microempresas no es el adecuado; una vez ponderados los resultados, llega al 45% de la situación establecida como ideal, con diferente desempeño en cada ámbito que lo detallamos a continuación:

#### Ámbito Administrativo

De los indicadores más relevantes en el ámbito administrativo, podemos rescatar que la permanencia en el mercado de las microempresas es de un promedio de 16 años, siendo la más antigua la fundada en 1926; el mayor porcentaje, el 44% de ellas, se introdujo en el mercado en la última década; sin embargo, a pesar de su relativa estabilidad, apenas el 28% cuenta con un local propio; un 23% de los encuestados tiene una estructura organizativa definida en sus negocios, ellos no disponen de equipos informáticos que les posibiliten un mejor control de su actividades; el 76% no dispone ni siquiera de un computador; la informalidad de sus negocios alcanza el 93%, lo que les impide acceder a beneficios o programas gubernamentales y de organismos gremiales, ya que apenas un 12% pertenece a cámaras artesanales u otras asociaciones; tan solo el 40% de los microempresarios ha recibido capacitación; sin embargo, una de sus fortalezas radica en su predisposición al cambio, un 75% está dispuesto a recibir capacitación y

considera que las universidades locales serían una buena opción para ello. Como resultado tenemos que el desempeño administrativo de las microempresas llega a un 46%.

*Ámbito financiero:* En el análisis de los factores internos del ámbito financiero, buscamos conocer con qué grado de eficiencia manejan sus recursos, en este sentido se pudo establecer que si bien un 85% de los encuestados tiene una cuenta bancaria (ahorros), en su mayoría, el 54%, no tiene registros contables, lo que ha ocasionado que el 76% de los encuestados afirme desconocer la rentabilidad real de sus bienes y/o servicios ofrecidos. Por otra parte, si bien el 52% ha tenido acceso al crédito, este no ha sido obtenido en condiciones favorables, se refleja un apoyo de las cooperativas que los han calificado como sujetos de crédito al 64% de los beneficiarios; un 19% accedió a los bancos privados; un preocupante 11% recurrió a los agiotistas, con tasas de interés fuera de la ley y los consecuentes riesgos que ello significa; y apenas el 6% recurrió a la banca pública.Sobre este mismo tema, al consultarles sobre la tasa de interés con la que recibieron sus créditos, el 8% lo recibió a tasas entre 8 y 14 puntos, mientras que el 30%, a tasas que llegaron al 28%; sin embargo, la mayoría, un 62%, manifestó desconocer la tasa con la que fue concedida su operación crediticia. Como resultado tenemos que el desempeño financiero de las microempresas llega a un 46%.

*Ámbito de mercado:* El mercado se constituye en el sector de menor desempeño de las áreas funcionales de las microempresas con un 43%; entre los indicadores más relevantes se destacan la baja utilización de las tecnologías para promocionarse, apenas el 1,1% de los encuestados tiene página web (4 microempresarios dedicados a la joyería y una sala de belleza); el 24% dispone de internet, quienes no lo tienen respondieron mayoritariamente porque no lo necesitan. Al ser consultados respecto de la cartera de sus consumidores, esta es mayoritariamente local, con un 88%; el 9% nacional y tan solo el 3% destinado a la exportación. En la pregunta que indaga el por qué no exportan, el 70% señala que por desconocimiento, seguidos de capacidad insuficiente y precios no competitivos en porcentajes menores; el 22% de los encuestados manifiesta realizar estudios de mercado; a pesar de lo señalado, el 45% tiene planificado ampliar su negocio. Ámbito de la producción El ámbito de la producción se constituye en uno de los mejores puntuados con un 55%; comentemos los resultados por los indicadores más críticos; apenas un 27% de las microempresas cuenta con sistemas de control de calidad, su gran mayoría, no los posee y, más aún, desconocía de qué se trataba.

En cuanto a la implementación de sistemas de salud y seguridad ocupacional (que exige el código ecuatoriano), la respuesta también fue baja, tan solo el 34% conocía algo sobre el tema. Su área productiva es particular, por la mayor influencia de la mano de obra sobre la maquinaria, en donde el 65% realiza labores intensivas en mano de obra y en su mayoría considera que los equipos auxiliares para llevar adelante su labor se encuentran en buen estado; sin embargo, los costos representan un problema, no solo por su incremento, sino fundamentalmente por no haber innovado sus procesos productivos que les impide ser más eficientes, de ahí que su volumen de producción disminuyó en un 51% en el último año. Por otra parte, no tienen mayores problemas en el abastecimiento de materias primas, ya que en su mayoría son de origen nacional (un 79%) y además tienen las facilidades para llegar a sus proveedores.

*El entorno:* En general, el entorno en el que se desenvuelven estas unidades productivas no es el adecuado, si comparamos con los ámbitos anteriores, llega al 35% de lo establecido como entorno ideal; en cuanto al acceso a los servicios básicos, apenas el 5% lo califica como excelente y el 45% como bueno, el resto de microempresarios no son servidos adecuadamente por los gobiernos locales; un 76% de los encuestados señaló que no ha recibido ningún apoyo de organismos públicos ni privados. Al ser consultados sobre el desempeño general del país, se encuentran de cierta forma satisfechos en un 65%; su preocupación va orientada sobre todo a problemas con la seguridad interna, que afecta a sus talleres y que lo evidenciaron como uno de los problemas que más incide en sus negocios, esto consideran que va de la mano de clima político, que lo calificaron entre regular y malo en un 75%. En general, estos han sido los hallazgos más importantes.

#### CONCLUSIONES

Los resultados obtenidos dan muestra de la posición desfavorable de las microempresas ubicadas en la ciudad de Cuenca, lo cual determina que no sean competitivas y que a corto plazo no puedan tener un crecimiento y desarrollo adecuados si no se implementan acciones inmediatas, tanto en su manejo interno, cuanto en la influencia negativa que reciben de su entorno. Son evidentes los problemas en los ámbitos administrativos, financieros, de mercado y producción, motivados por aspectos internos de la organización. Su inadecuada dirección y la falta de capacitación limitan la innovación, lo que ha posibilitado que su portafolio de productos no se renueve y sigan ofreciendo artículos similares, con precios incrementados. El manejo financiero informal y la falta de utilización de las tecnologías para su gestión, impiden que los microempresarios tengan un conocimiento real de su situación en cuanto a costos y márgenes de rentabilidad, lo cual ha provocado que su acción, en una gran mayoría, les sirva únicamente para cubrir sus necesidades básicas y no les permita expandirse.

Mientras más vulnerable es la organización, su acceso al crédito no solo que se limita, sino que se produce en condiciones más desfavorables; las tasas de interés para el microcrédito, en general, son elevadas; la usura, a pesar de ser ilegal, está presente en la economía local. Los microempresarios no están preparados para hacer frente al mercado internacional a través de la exportación de sus productos, debido al desconocimiento de procesos, insuficiente capacidad instalada, falta de promoción, lo cual precisamente hace falta al país, por estar inmerso en una economía dolarizada que requiere del ingreso de divisas, para no depender exclusivamente del petróleo en el sostenimiento del modelo. El entorno no colabora adecuadamente en el desarrollo de estos sectores productivos, ya que el ambiente político y, sobre todo, la inseguridad les afectan ostensiblemente. En general, consideramos que para que este sector tenga un mayor impacto en la economía, mediante la utilización sistemas de planificación, se debe implementar, por parte del Estado, políticas tanto internas cuanto externas, que posibiliten el acceso a recursos financieros, con tasas competitivas, dentro de un ambiente político y social que promueva la confianza en todos los actores productivos.

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# **EL CONSUMIDOR POSTMODERNO**

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#### RESUMEN

La postmodernidad, como modo de pensamiento, permea las prácticas de compra y consumo de la sociedad, siendo éste último orientado a lo novedoso, al culto por el desarrollo personal y al bienestar. Cambios en los valores de los individuos se traducen en cambios en las exigencias de los consumidores, que deben ser conocidas por las empresas para orientar sus estrategias. La presente investigación aporta en el conocimiento de las tendencias del consumidor postmoderno, entregando la caracterización de compra y consumo del segmento adulto joven universitario de la ciudad de Cali. Se trabajó bajo un enfoque de investigación mixto logrando dimensionar la magnitud de las preferencias, valores y razones de consumidores: sibarita, receptivos a la novedad y al disfrute del placer sensorial; armonizado, centrados en sus logros para escalar socialmente; disciplinado, con prácticas de consumo racionales y valoración por el deber y la responsabilidad; performer, ambicioso y dispuesto a asumir retos.

PALABRAS CLAVES: Consumo postmoderno, comportamiento del consumidor, segmentación de mercados.

# **POSTMODERN CONSUMER**

#### ABSTRACT

Postmodernism is viewed as a useful term to interpret and explain present day consumption patterns where consumption is viewed as being hedonistic, self-affirming, and compensatory. This research studies the consumption of a young adult segment of the university city of Cali - Colombia; with the purpose of identify postmodern consumption characteristics. Cluster analysis identified four consumer profiles: sybarite: receptive to novelty and enjoyment of sensual pleasure; harmonized: focus on their achievements that allow social climbing; disciplined: rational consumption practices and valuation for duty and accountability; performer: ambitious and willing to take on challenges. The results help in the decision making of marketing and advertising for youth segment.

**JEL:** M31, C38

KEY WORDS: Consumer Postmodern, consumer behavior, market segmentation.

# **INTRODUCCIÓN**

El consumo participa en la construcción simbólica de las identidades de los individuos postmodernos permitiéndoles la diferenciación individual y colectiva, por lo cual, el análisis del consumo no debe hacerse sólo desde su perspectiva económica, sino también desde su dimensión simbólica. El valor económico asociado a los productos, ha evolucionado desde las comodidades, bienes y servicios hacia las experiencias emocionales y de placer por lo cual la compra de un producto no está únicamente asociada a su funcionalidad, sino también al placer o satisfacción emocional que se deriva del consumo mismo, así, la motivación del comportamiento de compra no es solamente racional.

Los cambios en el consumo, impactan directamente en el enfoque que debe tomar el marketing y la publicidad observándose una tendencia hacia la satisfacción emocional más que en las funciones o

aspectos utilitarios de los productos. Sin embargo, la definición de las estrategias de marketing y publicidad deben partir de un conocimiento amplio y profundo de las tendencias del consumo, por lo cual se hace necesario conocer, que tanto de estas características postmodernistas, se observan en el consumidor colombiano.

El presente artículo muestra los resultados de una investigación que se enfocó en la caracterización del comportamiento de compra y consumo en uno de los segmentos de mercado que puede ser más afectado por las características postmodernas, como es el de los adultos jóvenes (que se encuentran entre los 18 y 25 años) y específicamente se desarrolla en la ciudad de Cali.

# **REVISIÓN LITERARIA**

El valor económico asociado a los productos, ha evolucionado desde las comodidades, bienes y servicios hacia las experiencias emocionales y de placer por lo cual la compra de un producto no está únicamente asociada a su funcionalidad, sino también al placer o satisfacción emocional que se deriva del consumo mismo, así, la motivación del comportamiento de compra no es solamente racional. Lo anterior implica comprender que el consumo hace parte de los rituales de la vida cotidiana y es un acto cargado de significados culturales que vale la pena descifrar.

La postmodernidad surge con la pérdida de la confianza en los proyectos de transformación de las sociedades, entonces el futuro se sacrifica por un presente libre de compromisos, despreocupado y relativista (todo depende, todo vale). Se caracteriza por el rechazo a la adhesión a ideas de grandes proporciones, la aversión a comprometerse con un sentido único de la vida; por la subordinación de lo común a lo individual; proclama el predominio del sentimiento sobre la razón, pero evade el drama, la pasión y el furor. No se aferra a nada, ni siquiera a sus propios criterios. (Severiano, 2005, p.13).

El consumo postmoderno es una actividad que trasciende el uso o compra de productos y servicios, es más que un simple intercambio de valor comercial. Es una actividad individual y social, que le permite al individuo el disfrute de productos para satisfacer sus necesidades, sus deseos, pero también le aporta el sentido de pertenencia a un grupo determinado, o al menos pretender pertenecer. Además le proporciona elementos que aportan a su auto imagen en una sociedad que equipara el tener con el ser. Por lo tanto, el individuo entra en una compulsión por tener, comprar, renovar modelos de sus aparatos para seguir siendo reconocido y apreciado por el entorno y por si mismo.

Los consumidores postmodernos se apropian de los productos o servicios dependiendo de lo que éstos simbolicen para ellos, y es a partir de esos valores simbólicos otorgados que los sujetos interactúan y le dan sentido a sus relaciones, construyendo su identidad y sus diferencias.Se define entonces, el consumo simbólico (como otra característica del consumo postmoderno), que implica la importancia que el consumidor les otorga a los demás respecto a la valoración simbólica que le atribuye a los productos como instrumentos de interacción social. López (2007) considera que los individuos postmodernos eligen los objetos de consumo no por sus características utilitarias, sino por lo que ellos significan. Ahora éstos se convierten en satisfactores de necesidades psicológicas tales como bienestar, personalización, espontaneidad entre otras.

# METODOLOGÍA

Se definió como población objetivo a los hombres y mujeres universitarios de estratos 3 al 5 residentes en la ciudad de Cali, en edades comprendidas entre los 18 y 25 años. La investigación fue de tipo cuantitativa transversal simple, para lo cual se diseñó un instrumento de medición estructurado. Se trabajó con una muestra de 389 estudiantes universitarios, lo que corresponde a un error del 4.8% y un nivel de confianza del 95%. El trabajo de campo se realizó durante los meses de abril a julio del año 2009.

#### RESULTADOS

La primera etapa del Análisis Clúster requiere la definición del número de clúster la cual se dio a partir del establecimiento de las mayores distancias entre ellos a partir de un rango de 4 a 6 grupos, encontrando que la unión de 4 clúster muestra una distribución un poco más equilibrada en su asignación de elementos de pertenencia. Adicionalmente, se puede analizar la distancia en las que se combinan los conglomerados, en donde se observa un cambio en la etapa 384 (4 clúster). En este sentido, estos análisis sugieren como agrupación adecuada el trabajar con 4 clúster. Posteriormente, se aplicó el algoritmo no jerárquico para K medias indicándole que formara 4 grupos a partir del criterio anterior.

Para la descripción de los grupos, inicialmente se analizan los centroides de cada clúster los cuales representan los valores promedios de las variables contenidas en cada uno de ellos. Los centroides permitieron describir cada conglomerado al asignarle un nombre o etiqueta. En el grupo 1 las puntuaciones más altas están en las variables de personalidad sociable y las afirmaciones "considero que merezco lo mejor y estoy dispuesto a dármelo", "siento placer al comprar", "me gusta lo novedoso o diferente". Este grupo puede etiquetarse como SibaritaEn el grupo 2 es más alta la variable responsable y las afirmaciones "valoro mucho mi libertad", "se interesa en el futuro", "me preocupo mucho por mi bienestar físico y emocional". Se le puede denominar a este grupo Armonizado

En el grupo 3, las variables son: responsable; se interesa en el futuro; me preocupo por mi apariencia física; va a comprar solo cuando tiene que hacerlo, por lo cual se le llama: Disciplinado. El Grupo 4 muestra valores altos en: confiable, descomplicado, "valoro mucho mi libertad"; "considero que me merezco lo mejor y estoy dispuesto a dármelo"; "me intereso mucho en mi futuro"; "me gustaría diferenciarme de los demás tanto en mi forma de pensar como de actuar"; está centrado en su bienestar. A este grupo se le llama Performer. A partir del análisis psicográfico, se pueden definir los siguientes perfíles de los clúster:

Sibarita (C1): Abierto a experiencias nuevas, extrovertido, organizado, seguro y sociable. Considera la moda muy importante y una ayuda para definir su estilo. Se preocupa por la apariencia física, siente placer al comprar y considera que se merece lo mejor. La compra es para este grupo una forma placentera de utilizar su tiempo libre, sale de compras sin un propósito definido y considera que la mayoría de las veces compra por impulso. Valora la renovación de los modelos de los productos que usa, se preocupa por su bienestar físico y emocional. Le rinde culto a su cuerpo, le gusta lo novedoso y diferente y busca objetos de consumo que lo diferencien de los demás.

Los valores que rigen su vida son la honestidad y sinceridad. Le da importancia a la familia, a la belleza, al cuerpo, pareja, dinero, apariencia física, amor, felicidad y amistad. Siente confianza por sí mismo y por las entidades de salud, las instituciones financieras, las entidades sin ánimo de lucro, las empresas públicas, la Iglesia y el gobierno. En este grupo existe la mayor proporción de personas interesadas en realizarse una cirugía estética, teniendo como principales motivos el lucir mejor físicamente y para sentirse satisfecho consigo mismo lo cual se relaciona con su híper-valoración al cuerpo y a la belleza.

Armonizado (C2): Alegre, descomplicado, organizado, prudente, responsable y sociable. Le gusta diferenciarse de los demás tanto en la forma de pensar como de actuar. Valora su libertad. Le interesa mucho su futuro, se preocupa por su bienestar físico y emocional. Le gusta lo novedoso y diferente. Los valores que rigen su vida son el amor, la tolerancia, la solidaridad. Le da importancia a la familia, futuro, deporte, salud, felicidad. Siente confianza por sí mismo y por las instituciones educativas, empresas privadas, los amigos, la policía, el ejército. Disciplinado (C3): Calmado, organizado, pasivo, poco sociable, seguro. Se preocupa por su apariencia física. Va a comprar sólo cuanto tiene que hacerlo. Se interesa mucho en su futuro. Los valores que rigen su vida son el respeto, compromiso, responsabilidad y

justicia. Le da importancia a la familia, a la paz interior, al medio ambiente, al futuro, al trabajo y al amor. Siente confianza por las instituciones financieras, el gobierno, los amigos, la familia, la justicia, el ejército, la policía, la pareja, las organizaciones no gubernamentales.

Performer (C4): Abierto a experiencias nuevas, activo, ansioso, confiable, descomplicado, desorganizado, extrovertido, irresponsable, seguro, sociable. Le gusta diferenciarse de los demás tanto en su forma de actuar como de pensar. Valora mucho su libertad. Considera que merece lo mejor y esta dispuesto a lograrlo. Va a comprar sólo cuando tiene que hacerlo. Se concentra en el presente, le interesa el futuro y se centra en su propio bienestar. Tiene desconfianza en las instituciones, considera que sus intereses van primero que los de los demás y está en búsqueda continua de placer. Los valores que rigen su vida son la fidelidad, perseverancia, lealtad y humildad. Le da importancia a la familia, salud, futuro. Siente confianza por si mismo y por los amigos, la familia y la pareja.

#### CONCLUSIONES

En su comportamiento de compra y consumo, los adultos jóvenes universitarios caleños, están insertados en la cultura narcisista propia de la posmodernidad siendo su mayor preocupación la realización individual y privada, teniendo una estrecha relación en su consumo con la expresión de la libertad, la conservación de la juventud, la búsqueda de la belleza y la buena figura, la felicidad y el éxito personal. Ellos exponen su gran valoración a los anteriores aspectos, planteando que se identifican fuertemente con afirmaciones como: "valoro mucho mi libertad", "me gusta diferenciarme de los demás", "me merezco lo mejor y estoy dispuesto a dármelo y "me gusta lo novedoso y diferente".

Se identificaron en los entrevistados cuatro perfiles o clúster de consumidores, tomando como referencia la clasificación propuesta Hausel et al (2008), teniendo claro que los integrantes de la muestra se encuentran dentro de la gran categoría del consumo postmoderno, donde es claro que la compra y uso productos no está determinado por la funcionalidad básica de los productos, sino por los significados de los productos y marcas. Estos perfiles que corresponden a la agrupación de una serie de rasgos individuales, sociales y económicos desembocaron en los siguientes grupos.

Sibarita el cual está sustentado en las características del consumidor hedonista puro, abierto a lo nuevo, en busca de aventura, con una gran valoración hacia el placer sensorial, rinde culto al cuerpo y en el disfrute que puede obtener a través de él. La moda para este grupo es fundamental pues la actividad misma de la compra le proporciona placer, ama comprar por impulso, además de disfrutar de la novedad y el cambio. Su gran preocupación por la apariencia física y su culto al cuerpo le conducen a estar dispuesto a realizarse cirugías. Se define como sincero, extrovertido, organizado y seguro.

Segundo grupo, Armonizado: Se define como alegre, descomplicado, prudente y organizado, teniendo como valores el amor y la tolerancia, le preocupa su bienestar físico y emocional, por lo cual da gran importancia a la salud. Aunque disfruta comprar, está más dominado por el sentido de realidad. Evalúan la calidad, busca la correcta relación precio - beneficio y tiende a ser fiel a las marcas, aunque están abiertos a la novedad, son fieles a las marcas, pues consideran que las han elegido por convicción y ha elaborado buenas razones para cada elección. Tercero, Disciplinado: Se define como responsable, calmado y organizado, preocupado por su apariencia física. Es de los cuatro grupos el que tiene confianza en algunas instituciones, disfruta de sus actividades sociales y familiares. Le gusta compartir con su familia, tiene una mirada optimista del futuro y se ha trazado un plan de vida acorde con las expectativas del entorno, bajo los parámetros tradicionales.

Cuarto, Performer: se define como ansioso, desorganizado y extrovertido, con gran necesidad de diferenciarse de los demás. Para este conglomerado el uso de prendas de vestir de marca le aporta status, permitiéndole destacarse. El consumo de las marcas cumplen un doble papel: representan la posibilidad

de diferenciarse, pero también la opción de identificarse con un grupo de referencia al cual le agradaría pertenecer.

Sería de gran interés llevar a cabo un estudio lo suficientemente amplio, en términos de tamaño muestral y el cubrir un mayor espacio geográfico, que permitiera establecer modelaciones por medio de variables socioeconómicas. Quedan abiertos nuevos interrogantes con respecto al consumo y a la construcción de individualidad de las nuevas generaciones y también el profundizar desde una mirada ética, el ejercicio profesional del comunicador publicitario y el profesional en mercadeo en el marco de las características del consumo postmoderno.

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#### RESUMEN

El inevitable proceso de globalización al que los países subdesarrollados han tenido que ingresar y con ello enfrentarse a los cambios económicos internacionales, da la pauta para que el sistema económico del cual forman parte las empresas perfeccione la gestión de sus entidades. Por lo tanto reviste de suma importancia que las decisiones que tomen quienes dirigen a estas empresas sean efectivamente evaluadas, pero ¿hasta dónde los directivos consideran el riesgo de una decisión equivocada? El objetivo del presente es conocer los beneficios de la aplicación de la auditoría de gestión generando con ello la posibilidad de que esta sea considerada por los empresarios como una herramienta que a futuro podría ahorrarles decisiones costosas. La auditoría de gestión constituye una de las técnicas más avanzadas de la administración moderna, por lo que es necesario perfeccionar la actividad de auditoría para contribuir al proceso de perfeccionamiento empresarial en el logro de sus objetivos de eficiencia y competitividad. El trabajo es novedoso desde el punto de vista teórico, se logra un enfoque integrador del control interno, y su evaluación desde la óptica de la auditoría al desempeño de la gerencia de riesgos, lo que enriquece los procedimientos de auditoría vigentes, logrando sistematizarse en la práctica empresarial con resultados positivos.

PALABRAS CLAVE: Auditoría de Gestión, Programa Flexible, Evaluación.

## MANAGEMENT AUDITING AND DECISION-MAKING RISK ANALYSIS

#### ABSTRACT

The inevitable process of globalization that developing countries have had to enter and thus face the international economic changes, sets the tone for the economic system of which the form part of the companies refine their management entities. Therefore it is of utmost importance for the decisions they make those who run these companies are effectively evaluated, but how far managers believe the risk of a wrong decision? The purpose of this is to know the benefits of implementing the audit thus generating the possibility that this will be considered by employers as a tool that could save future costly decisions. The audit is one of the advanced techniques of modern management, making it necessary to improve audit activity to contribute to business improvement process in achieving its goals of efficiency and competitiveness. The work is novel from theoretical point of view, is achieved by integrated approach to internal control, and evaluation from the viewpoint of the performance audit of risk management, which enriches the existing audit procedures, making systematized in the business practice with positive results.

#### JEL:M42

**KEYWORDS:** Audit Management, Flexible Program, evaluation **INTRODUCCIÓN** 

Hablar de auditoría de gestión es adentrarse en un campo profesional completamente nuevo en México, algunos autores conciben a este campo como un área que comparan con la auditoría financiera, algunos

otros consideran que es una parte, un trabajo parcial dentro de lo que es la auditoría de los estados financieros incluso dentro de lo que es la bibliografía existente algunos consideran a la auditoría operativa como algo similar a la de gestión.

El término "auditoría operativa" fue usado por primera vez, por auditores internos progresistas en los años cincuenta, para describir el trabajo que estaban realizando para mejorar las operaciones que auditaban. El enfoque constructivo, las técnicas y los resultados positivos que caracterizan a la auditoría operativa, fueron usados por primera vez en la fabricación, comercialización y marketing, pero son igualmente aplicables a las actividades públicas, instituciones financieras, económicas, organizaciones de servicios y a cualquier organización de suficiente tamaño, para mantener una auditoría interna, como función separada o específica. Se caracteriza por el enfoque y la mentalidad del auditor, no por métodos distintos. Puede ser una ampliación de las normales actividades de auditoría interna, esto es: financieras, o de revisión de ciclos. Aplica las habilidades, conocimientos y técnicas de los auditores a los controles operativos específicos que existen en los negocios. El sentido común y una buena visión personal de las actividades del negocio, son los activos fundamentales de un buen auditor operativo, forma o tipo de auditoría que caracteriza bien las auditorías modernas.

La auditoría de gestión es la evaluación que realiza un auditor independiente de una empresa con el fin de emitir un informe profesional, vinculado a la evaluación de la economía y eficiencia de las operaciones de dicha empresa, la eficacia en el cumplimiento de los objetivos y el respeto por parte de la administración o dirección de la ética, la equidad y la ecología (Cardenas, 2008)

La gestión de la dirección comprende lo adecuado de las políticas, objetivos y metas propuestas, los medios para su implantación y los mecanismos del control interno que posibiliten el seguimiento de los resultados obtenidos. Esta conceptualización es una de las más completas. Existen diferentes definiciones, pero todas coinciden en señalar que el objetivo final de este tipo de auditoría, es asegurar la eficiencia de una organización para que pueda alcanzar los objetivos establecidos, así como examinar la calidad y aciertos de la gestión de su dirección. Sin embargo para llegar a la denominación actual y mayoritaria de auditoría de gestión, se ha transitado por los términos: auditoría operacional, auditoría de sistemas, auditoría de métodos y procedimientos y auditoría administrativa. Además de que a pesar de todos los intentos de definirla con precisión, no siempre hay claridad en la comprensión de lo que debe entenderse por auditoría de gestión, no se trata solamente de que se utilice el análisis de métodos, sistemas y procedimientos que pueden estar presentes también en otros tipos de auditorías, el objetivo fundamental, consistente en evaluar, el nivel de economía, eficiencia y eficacia en la gestión de la dirección con relación a los objetivos previstos en cada área auditada, para ayudar a la administración a mejorar los resultados.

En la auditoría de gestión, es necesario llegar con el análisis hasta las causas que generan los problemas o desviaciones y su efecto económico, pues no es suficiente conocerlos y dominarlos en la práctica, también es necesario saber que los origina, para incidir realmente con las recomendaciones en los resultados. La participación de los auditados es fundamental, ya que cuando se detecta un problema quienes mejor pueden encontrar la solución son ellos, y cuando se proponen la implementación de medidas correctivas ellos se sienten comprometidos a cumplirlas. Importante considerar que no se trata únicamente de encontrar desviaciones, también hay que identificar las oportunidades para mejorar los resultados. Por lo tanto se considera que la auditoría de gestión surge como una necesidad, en primer término, de cubrir todas las áreas de riesgo de una organización, sin limitarse sólo a las áreas administrativas o a las económico-financieras, aunque también existen otros factores que han influenciado en su evolución y desarrollo.

#### **REVISIÓN DE LA LITERATURA**

La gestión de la dirección comprende lo adecuado de las políticas, objetivos y metas propuestas, los medios para su implantación y los mecanismos del control interno que posibiliten el seguimiento de los resultados obtenidos. El Instituto Norteamericano de Contadores Públicos (AICPA) enumeran las ventajas que pueden derivarse de una auditoría de gestión:

- 1 Identificación de objetivos, políticas y procedimientos aun no definidos;
- 2 Identificación de criterios para la medición del logro obtenido de la organización;
- 3 Evaluación independiente y objetiva de operaciones especificas;
- 4 Evaluación de cumplimiento de los objetivos, políticas y procedimientos;
- 5 Evaluación de la efectividad de los sistemas de control gerencial;
- 6 Evaluación de la confiabilidad y utilización de la información gerencial;
- 7 Identificación de áreas críticas o problemáticas y de las causas que las originan, etcétera.

Proponer la auditoría de gestión como evaluación de riesgos de las decisiones de los directivos o la alta gerencia no es descabellado es una herramienta que podrá resultar económica una vez que se implementa que además posibilita la posibilidad de una metodología que será compleja. El contenido del informe de auditoría de gestión puede incluir los siguientes puntos:

- 1. Antecedentes de la entidad y motivo del informe;
- 2. Descripción de las áreas críticas auditadas;
- 3. Información sobre conocimiento del negocio y de la organización;
- 4. Objetivos y alcance de la auditoría;
- 5. Indicadores y normas de reconocimiento utilizados;
- 6. Evaluación de las seis "E" (economía, eficiencia, eficacia, ética, equidad y ecología);
- 7. Conclusiones y recomendaciones;
- 8. Opiniones de la administración.

Este tipo de auditoría puede ser ejecutada por auditores externos y por auditores internos. En opinión de los investigadores, coincidente con la de varios autores, el más indicado y que mayor eficiencia y efectividad puede lograr en su desarrollo en beneficio de la organización auditada es el auditor interno, este al encontrarse identificado con la cultura de la organización facilita la identificación de problemas así como de fortalezas de la misma. Es ineludible considerar que periódicamente la entidad solicite la aplicación de la auditoría de gestión por parte de auditores externos ya que estos fieles al principio de respetar la independencia de criterio podrán ser críticos objetivos, al señalar no las deficiencias sino las áreas criticas que pudieran descuidarse por la excesiva confianza que pudiera tener un auditor interno en el conocimiento de los procedimientos de la organización Los riesgos afectan la habilidad de cada entidad para sobrevivir, competir con éxito dentro de su sector, mantener una posición financiera sólida y una positiva imagen pública, referida a la calidad de sus productos, servicios, empleados y medio ambiente. No existe ninguna forma práctica de reducir el riesgo a cero. De hecho el riesgo es inherente a los negocios. La dirección de las empresas debe determinar cuál es el nivel de riesgo que se considera aceptable y esforzarse para mantenerlo dentro de los límites fijados. La aceptación del riesgo es esencial para el progreso y a menudo los fracasos son una parte fundamental del aprendizaje. Aunque algunos riesgos no se pueden evitar, el intentar reconocerlos y controlarlos no debe limitar las oportunidades de emplear la creatividad. La administración riesgo surge por la necesidad de que las empresas determinen a que están expuestas, de los cuales un número de ellos no pueden ser transferidos a las entidades dedicadas a prestar servicios de seguros, requiriéndose la investigación de los riesgos como tal y seleccionar las herramientas a utilizar para enfrentarlo con eficacia. Tan sólo recientemente se ha considerado la creación de la gerencia de riesgos como una actividad de significativa importancia en la estructura organizativa de la empresa, la cual es una actividad que puede contribuir de manera efectiva a garantizar el rendimiento del capital invertido en las empresas.

En México las entidades consideran que aumentar el número de departamentos dedicados a trabajos administrativos nos son necesarias, ya que todo lo que no se traduzca en ganancias monetarias no sirve, un próximo trabajo sería necesario para presentar estrategias que convenzan a los empresarios de la importancia de minimizar los riegos de las decisiones y como poco a poco pueden estas evaluarse a tiempo disminuyendo el riesgo al mínimo tolerable por la organización. Un riesgo es la posibilidad de sufrir una pérdida. Para un proyecto específico puede ser un producto terminado con menor calidad, costos más elevados, retraso en la ejecución de una inversión o no alcanzar el objetivo o meta fijada. En otras palabras, un riesgo es un problema en espera de ocurrir. Algunas definiciones que se pueden dar del riesgo son:

- 1 Incertidumbre de que un suceso pueda ocurrir
- 2 Exposición a determinada eventualidad económica desfavorable
- 3 Acontecimiento futuro posible e incierto de naturaleza objetiva, cuya ocurrencia causa un daño concreto.
- 4 Grado de probabilidad de pérdida
- 5 Posibilidad de que un suceso ocurra y provoque pérdidas a una persona natural o jurídica, en sus personas o bienes.
- 6 Amenaza de contingencia dañosa.

Las empresas por el hecho de su existencia, puede estar sujeta a riesgos por:

- 1 Pérdida o daño de activo.
- 2 Pérdida por actos que ocasionen daños a terceros.
- 3 Mercado (cambios de precios, de la moda, la competencia).
- 4 Producción (mal funcionamiento de las maquinarias y equipos, problemas técnicos, fallas en el suministros de materias primas y materiales).
- 5 Financieros (atraso de cobros, retribución de los dueños, incumplimiento de la ganancia proyectada, variaciones del tipo de cambio, variaciones de la tasa de interés, préstamos denegados).
- 6 De personas (muerte, invalidez física, lesiones).
- 7 Políticas (guerra, crisis económicas).
- 8 De la naturaleza (terremotos, ciclones, tornados, sequías, plagas, inundaciones, rayos, truenos).

En un plano real de competencia empresarial diaria, y con el conocimiento del área pueden establecerse los objetivos que la administración de riesgos persigue:

A. Los que anticipan los acontecimientos.

- Identificación de los recursos materiales, humanos y financieros de la empresa.
- Identificación de los riesgos a que están expuestos los recursos de la empresa.
- Evaluación del posible impacto financiero de un accidente o un riesgo financiero, mediante evaluación y medición adecuada.
- Jerarquización de los riesgos identificados y evaluados.
- Elaboración de los programas de prevención.

- B. Los que se refieren a las acciones durante los eventos
  - Elaboración de manuales y procedimientos de acciones.
  - Elaboración de planes de emergencia
  - Selección de alternativas para contrarrestar los efectos del evento.

C. Los previstos para después de ocurrido los eventos

- Supervivencia de la empresa.
- Financiamiento para la normalización de la empresa.
- Recuperación de seguros, fianzas y otros contratos.

#### METODOLOGÍA

La administración de riesgos se puede desarrollar de variadas formas, es decir: mediante la organización de un área específica dentro de la empresa, la contratación de los servicios a una consultoría o una empresa de seguros. Lo más importante es que los empresarios sean conscientes de las amenazas de los riesgos puros específicos del giro de su empresa y tengan en cuenta las diferentes alternativas para neutralizarlos parcial o totalmente, para evitar caer en situaciones de retenciones involuntarias e inconscientes que pueden poner en peligro la subsistencia de la empresa. La estructura del área de la administración de riesgo debe considerar entre otras las actividades siguientes:

Identificación.

- Elaboración, manejo y control del inventario de bienes de importancia estratégica.
- Análisis de los riesgos financieros a que está expuesta la empresa.
- Análisis de nuevos proyectos (nuevas instalaciones, nuevos productos, nuevos mercados).
- Entrevistas con el personal de las áreas operativas.

Medición y Evaluación.

- Recopilación de valores (valor de edificios, maquinarias, existencias, producción, ventas, cuentas por cobrar, préstamos obtenidos, inversiones (incluyen las financieras), etc.
- Creación y mantenimiento de estadísticas y datos históricos de pérdidas por la ocurrencia de eventos.
- Estudios técnicos estadísticos y actuariales para pronósticos de pérdida y costos de los riesgos.
- Métodos cuantitativos de evaluación (cálculos de pérdidas máximas probables o posibles y otros).

A pesar de que los programas de auditoría pueden ser rígidos, flexibles y mixtos, en dependencia al grado de libertad que se le concede al auditor en su trabajo. Y como "*ninguna empresa es idéntica a otra, por lo que es lógico que los programas de auditoría de gestión, deban diseñarse teniendo en cuenta las condiciones específicas de cada entidad de acuerdo al alcance y los propios objetivos de auditoría que se persiguen*"(Ruiz, 2001). Se comparte el criterio de que la existencia de programas flexibles previamente elaborados produce un efecto importante en la relación costo- beneficio de la auditoría de gestión. Es tiempo de que los profesionales de la auditoría elaboren el programa de acuerdo con los requerimientos de la organización o dicho de otro modo "hacer trajes a la medida" en ese contexto se estará estableciendo una aun más nueva área de auditoría dentro de la metodología propuesta y es la propuesta de programas flexibles para la auditoría de gestión.

Teniendo en cuenta estos criterios, los programas de auditoría de gestión deben ser flexibles para dar frente a circunstancias no previstas o elementos no conocidos que exijan hacer variaciones o ampliaciones a los programas confeccionados inicialmente, además, la auditoría de gestión es profundamente analítica y los programas deben dejar margen para que el auditor despliegue su iniciativa y creatividad en busca de las evidencias y el desarrollo de los hallazgos. Partiendo de lo anterior, se presenta el programa flexible elaborado, cumpliendo las características mencionadas, para auditar la gestión de la gerencia de riesgos. En la actualidad no se concibe una empresa que pueda sobrevivir sin una correcta planeación, la única certeza del futuro es su incertidumbre, los cambios suceden tan rápido que en algunas ocasiones apenas si conoces un cambio cuando ya te encuentras enfrentando el que sigue es decir un nuevo paradigma, la competencia por los mercados alcanza niveles insospechados y son imprevisibles los resultados y consecuencias de la revolución científico técnica, la innovación tecnológica es más estratégica que táctica, por lo tanto, la planeación estratégica se hace cada día más decisiva.

Al planear se definen los objetivos y se determinan los medios necesarios para alcanzarlos, por tanto, la planeación constituye quizás el elemento más importante dentro del ciclo de dirección. En esta fase de la dirección realiza pronósticos, auditoría de recursos, establece objetivos, traza estrategias, elabora planes de acciones y programas, fija políticas, procedimientos y normas de forma tal que se conjuguen todas las herramientas en un proceso armónico y coherente enfocado hacia las metas propuestas. El programa de auditoría de gestión se elabora para evaluar la calidad del sistema gerencial de las entidades en el proceso de identificar, analizar, evaluar, controlar y distribuir los riesgos que pueden repercutir en el cumplimiento de su misión, por tanto, se ha diseñado el programa y la ejecución de la auditoría siguiendo los pasos en las distintas etapas de la gestión de riesgos, abordándose los elementos y principios básicos contenidos en cada una de estas funciones, como serán:

- Comprobar si la administración efectúa una correcta planeación de sus operaciones, verificándose que se tracen objetivos y metas que guíen a la entidad al logro de sus objetivos generales.
- Evaluar el nivel de organización de la empresa y cómo se utiliza éste en busca de una mayor eficiencia económica.
- Evaluar el cumplimiento del control interno en la entidad, en especial, las relacionadas con el componente evaluación de riesgos.
- Detectar fallas en el proceso de administración de riesgos que afectan el cumplimiento de los objetivos y metas de la empresa y deban ser corregidas.

#### CONCLUSIONES

La persistencia actual de crisis financieras recurrentes han afectado a un gran número de empresas a nivel global, en México la vulnerabilidad de las organizaciones es un punto que no debe perderse de vista considerando que la mayoría de estas son pequeñas y medianas empresas las cuales requieren de una constante asesoría en la cuestión de riesgos apoyados en un eficiente sistema de control interno.

La auditoría de gestión puede considerarse como una técnica que la administración actual puede utilizar en bien de la misma organización, considerando que su objetivo es detectar y evaluar las causas que afectan la economía, eficiencia, eficacia así como el impacto que esta tiene en el medio ambiente empresarial.

No podrá dejarse de lado la importancia del control interno en el proceso de gestión, ya que este coloca a la organización como una entidad organizada y con una estructura que le permitirá tener permanencia. La gerencia de riesgos, debe ser evaluada mediante efectivos programas de auditoría de gestión; cómo el programa flexible propuesto, que representa beneficios. El programa de auditoría de gestión, constituye

una herramienta viable para evaluar la actuación de los directivos de las empresas, impactando en el mejoramiento de otros sectores de la entidad y en el desarrollo de la gestión de riesgos, competitiva; permitiendo ajustar el cumplimiento del componente: "Evaluación de riesgos".

Por lo anteriormente expuesto se recomienda:

- 1. Que los cuerpos colegiados de las profesiones afines como son Licenciados en Contaduría y Licenciados en Administración, generen la capacitación de los profesionistas en el área así como la participación de las empresas para la capacitación del personal técnico de las mismas empresas a fin de lograr una efectiva aplicación de la gestión de riesgos.
- 2. Involucrar a las instancias pertinentes para que la aplicación y desarrollo de la herramienta se extienda a otros sectores de la economía.
- 3. Que los colegios de la profesión socialicen la aplicación de la auditoría de gestión ya que estos son los indicados para tal efecto y el logro del convencimiento de los empresarios.
- 4. Socializar por parte del Colegio de Contadores Públicos la metodología y aplicación de la auditoría de gestión de riesgos.
- 5. Iniciar con la propuesta de la reglamentación al respecto a fin de que se consideren sanciones las cuales aun no podrían presentarse en este documento pues tendría que ser material de otra propuesta en el futuro.

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# LAS NUEVAS TECNOLOGIAS, SU IMPACTO LABORAL Y TRANSFORMACIÓN DEL QUEHACER ACADÉMICO Y ADMINISTRATIVO: CASO FACULTAD DE MEDICINA, CAMPUS CIUDAD MENDOZA, VERACRUZ MÉXICO

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#### RESUMEN

La Universidad Veracruzana, Facultad de Medicina, Campus ciudad Mendoza, Veracruz se integra al MEIF (Modelo integral y flexible en el 2004) se destaca el paradigma hacia el aprendizaje de manera que el docente requiere de un perfil de competencias para el nivel de enseñanza superior. Es por ello, que la presente investigación tiene como objetivo analizar la importancia de las nuevas tecnologías en relación con su impacto laboral en la transformación del quehacer académico y administrativo que con lleva al desarrollo de las competencias didácticas y de autoaprendizaje que son parte del siglo XXI que facilitan el proceso de enseñanza-aprendizaje con el fin de formar a los estudiantes.

**PALABRAS CLAVE:** Universidad Veracruzana, Facultad de Medicina, competencias, tecnologías, impacto laboral, administrativo, didáctica y autoaprendizaje.

# NEW TECHNOLOGIES, ITS IMPACT AND TRANSFORMATION OF LABOR AND ADMINISTRATIVE ACADEMIC WORK: CASE SCHOOL OF MEDICINE, CAMPUS MENDOZA CITY, VERACRUZ MEXICO.

#### ABSTRACT

Veracruzana University, School of Medicine, Campus Mendoza city, Veracruz joins the MEIF (comprehensive and flexible model in 2004) highlights the paradigm towards learning so that teaching requires a competency profile for the higher education level. Therefore, the present investigation analyze the importance of new technologies in relation to their work in transforming impact of academic and administrative that leads to the development of self-learning and teaching skills that are part of the century XXI facilitating the teaching-learning process in order to train students.

#### **JEL**: I2, I21, I23,

**KEYWORDS:** Universidad Veracruzana, Faculty of Medicine, skills, technologies, impact labor, administrative, teaching and self-learning.

#### INTRODUCCIÓN

Desde finales del siglo XX se ha venido promoviendo tanto en Europa como en Latinoamérica un cambio de orientaciones curriculares y metodológicas en la formación universitaria. La Organización de las Naciones Unidas comprometida en transmitir una visión global de la educación destaca en el informe (Delors, 1996) los cuatro pilares: "*el aprender a conocer, el aprender a ser, el aprender a vivir juntos y el aprender hacer*" son ejes relevantes para la mejora de los sistemas educativos un enfoque diferente.

Para Ruíz Barrido, (2009) destaca la importancia del *paradigma* centrado en el estudiante estrechamente vinculado a la formación orientada a las competencias

El Modelo Educativo Integral y Flexible (MEIF) se integro en la Universidad Veracruzana a partir de 1999, en las cuatro regiones Xalapa, Poza Rica, Tuxpan y Orizaba. La Facultad de Medicina implemento el MEIF a partir del 2004 destacando los ejes teóricos, heurísticos y axiológicos que permean los programas educativos que promueven el aprendizaje de actitudes, habilidades y destrezas para su formación integral y significativa. Posteriormente en 2010, la Universidad Veracruzana implemento el Proyecto Aula tiene el objeto de promover una cultura institucional de innovación continúa en la práctica docente para consolidar el MEIF. El Proyecto Aula tiene un enfoque epistemológico sustentado en el pensamiento complejo, el desarrollo de competencias profesionales, la integración de la investigación y el uso de las tecnologías de la información y comunicación. Son aspectos claves que forman parte de la práctica educativa, es por ello que la presente investigación parte del siguiente cuestionamiento: ¿El uso de las tecnologías influyen en el quehacer educativo y administrativo en la Facultad de Medicina, Universidad Veracruzana, Campus Ciudad Mendoza?

El objetivo de la investigación parte de analizar la relevancia de las nuevas tecnologías en relación con su impacto laboral en la transformación del quehacer académico y administrativo que con lleva al desarrollo de las competencias profesionales de manera que en el estudio se abordara las competencias las docente en el Nivel Superior y se explicará la importancia de las tecnologías de la información en el Proyecto Aula. Posteriormente, se presentará la metodología utilizada en la estudio. Finalmente se presentará las conclusiones, recomendaciones y futuras líneas de investigación.

#### **REVISIÓN DE LITERATURA**

En la década de los noventa organismos internacionales como: la Organización de las Naciones Unidas para la Educación y Ciencia (UNESCO) y el Centro Regional para la Organización Superior en América Latina y el Caribe (CRESALC), sugirieron la adopción un nuevo rol del docente, de acuerdo a las demandas de una sociedad globalizada. "asumir una visión y un nuevo paradigma para la formación de los estudiantes, basados en el aprendizaje a lo largo de toda la vida, la orientación prioritaria hacia el aprendizaje" Para Zabalza (2003) el término de competencias docentes se caracterizan por ser complejas: combinan habilidades, principios y conciencia de las prácticas pedagógicas. Menciona las siguientes competencias: competencia planificadora competencia didáctica, competencia comunicativa que interviene las tecnologías, internet, multimedia, conferencia, plataformas, videoconferencias entre las más sobresalientes. Las TICS son utilizadas como una herramienta en el proceso de enseñanza –aprendizaje facilitan la interactividad del usuario y la interconexión. "Se aduce que ayudan a la educación permanente, a las nuevas actitudes requeridas por la sociedad-red, al nuevo y actual concepto de ciudadanía y a la alfabetización informática entre otras cosas". (Medina & Barquero, 2012)

La integración de las TICS tiene como finalidad mejorar la calidad de la docencia universitaria y hacer posible nuevas modalidades de enseñanza-aprendizaje, sobre todo la enseñanza a distancia o semi presencial, pero requieren de competencias docentes. Es por ello que el proyecto aula integra las Tics como un elemento fundamental para insertar la plataforma Eminus y la biblioteca virtual, cuyas herramientas fortalecen el autoaprendizaje. El docente puede orientar el proceso de andamiaje con el estudiante para interactuar y propiciar el conocimiento de manera presencial y semipresencial a través de habilitar los espacios virtuales por medio de: foros, debates y sesiones de chat con la finalidad de retroalimentar los conocimientos. Cabe señalar, que son aspectos de las tecnologías que el docente debe integrar en el diseño instruccional. Finalmente la TICS no debe estar separadas del proceso de aprendizaje-enseñanza, ya que es parte de los retos que el docente debe implementar en la praxis con la finalidad de fomentar la construcción de los aprendizajes, ya que es en una realidad planetaria de la sociedad del conocimiento.

#### METODOLOGÍA

En esta investigación la población fue de 63 catedráticas de la Universidad Veracruzana, Facultad de Medicina. Selecciono a 30 docentes, que forman parte de la mitad, muestra representativa que tiene un nivel alto de confiabilidad. Fue un estudio exploratorio, descriptivo, explicativo y prospectivo que nos presento las necesidades reales de capacitación.

La formula siguiente nos presenta el grado de confiabilidad de la muestra:

$$\mathbf{n} = \frac{Z^2 p q N}{N E^2 + Z^2 p q} \tag{1}$$

$$\mathbf{n} = \frac{(0.95)^2 (0.666) (0.333) (30)}{(30) (0.05)^2 + (0.95)^2 (0.666) (0.333)}$$
(2)  
$$\mathbf{n} = \frac{6.00463935}{0.200904645} = 29.88806571476$$
(3)

#### Muestra y Resultados

La muestra fue de 30 catedráticos que en su mayoría fueron hombres, la media de la edad fue de 53 años, y la media de antigüedad fue de 16 años, quienes contestaron el instrumento con la finalidad de analizar la importancia de las tecnologías de información en su práctica educativa. Los resultados que se presentaron nos permitieron desarrollar las siguientes tablas:

Tabla 1: Principales Indicadores del Instrumento con su Valor Porcentual Preferente

Integración de las tecnologías en la Planeación Didáctica	Participación en Proyecto Aula	Manejo de Multimedia	Uso de Plataforma Eminus
67%	60%	37%	83%
La tabla 1, describe los indicadore	s que integran el instrumento de inves	tigación que muestra los resultados	positivos con respecto al manejo de

La tabla 1, describe los indicadores que integran el instrumento de investigación que muestra los resultados positivos con respecto al manejo de las tecnologías que tienen los docentes en el Periodo de agosto2012-enero 2013.

T-11- 2. I M 1-1-1- 1- C-		- 1 T 1 (	- 1- T. C
Tabla 2: Las Necesidades de Ca	ipacitacion en Cuanto a	a las Tecnologias d	e la información

Curso de Multimedia	Biblioteca Virtual	Plataforma Eminus	Proyecto Aula	Sistema Tutorial	Sistema Registro Calificaciones	de de
40%	5%	15%	30%	5%	5%	

De acuerdo con lo anterior la Tabla 2, muestra las necesidades reales de capacitación en relación con la Tabla 1, se presentan inconsistencias en sus respuestas.

#### CONCLUSION

La investigación presenta la necesidad de fortalecer las competencias docentes en relación a las tecnologías de la información por ser un aspecto medular en la enseñanza del nivel superior se requieren integrarlas para favorecer los aprendizajes y sustentar los conocimientos y competencias de los estudiantes para una adecuada inserción social y profesional que evite la brecha digital de manera que las

tecnologías sean parte de la transformación del quehacer académico y administrativo.El quehacer del docente conlleva al desarrollo de las competencias didácticas, de planeación, organización de diseño y de aplicación de tecnologías con el fin de fortalecer el proceso de aprendizaje. Un papel bastante complejo que tiene retos que demanda la sociedad. El docente debe ser consciente que las tecnologías están insertas en los planes y programas del MEIF como una herramienta indispensable para motivar y desarrollar el proceso de enseñanza-aprendizaje. Es por ello, que debe ser guía para el adecuado uso de las TICS.

Los resultados que presenta la investigación nos permite proponer las siguientes recomendaciones para la Universidad Veracruzana: Implementar un programa de capacitación interna para los maestros en el uso de la multimedia para el desarrollo de materiales didácticos. Integrar a los docentes en el proyecto aula con la finalidad de elaborar sus planeaciones didácticas en relación a las competencias y a la integración de las tecnologías de la información. Programar un curso permanente que capacite a los docentes en la plataforma EMINUS y de Biblioteca Virtual es una herramienta tecnológica que permite interactuar con los estudiantes y enriquece la dinámica grupal. Las actividades pueden ser presenciales y semipresenciales, son aspectos que fortalecen la construcción del conocimiento.

En primer lugar convendría estudiar los posibles nexos entre los estilos de aprendizaje y el e-learnig. Con los recursos que proporciona las nuevas tecnologías haciendo uso de los recursos de la Universidad Veracruzana. En segundo lugar se podría diseñar materiales didácticos con la finalidad de capacitar a los docentes para el uso de las tecnologías de la información y periódicamente evaluar.

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#### RESUMEN

En los últimos años se ha conocido de distintos casos de enriquecimiento de los Servidores Públicos, en la republica mexicana sin que hasta el momento alguno de ellos este consignado por alguno de los delitos tipificados en la ley para este caso. Estas situaciones y la no muy definida entrada en vigor de la Ley de Transparencia y Acceso a la Información Publica Gubernamental, dio origen al presente documento el objetivo es efectuar un análisis de ambas leyes, en relación con la declaración patrimonial y su seguimiento posterior a su presentación, lo que de por resultado propuestas de modificación o establecimiento de seguimiento según el resultado que se obtenga de dicho análisis. La ley de Transparencia y Acceso a la Información Pública Gubernamental requiere el compromiso de quienes se consideran sujetos obligados de esta, a que se efectué en tiempo y forma, el gobierno mexicano ha realizado esfuerzos por que el acceso a la información se convierta en un derecho ciudadano.

PALABRAS CLAVE: Declaración Patrimonial, Funcionario Público, Transparencia.

## FINANCIAL DISCLOUSURE AS TOOL FOR FOR PUBLIC OFFICE TRANSPARENCY

#### ABSTRACT

In the last years it has been known in various cases of enrichment of Public Servants, in the Mexican republic without far one of them is inscribed for any of the offenses under the law to this case. These situations not very definite and entry into force of the Law of Transparency and Access to Public Government Information, gave rise to this document the goal is to make an analysis of both laws, in connection with the disclosure of assets and follow after its submission, that results in the proposed amendments or setting up according to the result obtained of this analysis. The Law of Transparency and Access to Public Government Information requires commitment of those who consider themselves obligated of this, to be made in a timely manner, the Mexican government has made efforts that access to information becomes a civil right.

*JEL:* K40, K49

KEYWORDS: Asset Declaration, Public Officials, Transparency

#### INTRODUCCIÓN

El antecedente del acceso a la información no es nuevo en México, ya que este inicia con la inquietud de contar con una regulación, sin embargo estas ideas no trascendieron. Actualmente es un concepto relativamente nuevo debido a que es hasta el 11 de junio de 2002 que fue publicada en el Diario Oficial de la Federación (DOF) la Ley Federal de Transparencia y Acceso a la Información Pública

Gubernamental (LFTAIPG) cuando en ese entonces era el presidente de los Estados Unidos Mexicanos el C. Vicente Fox Quesada. Es hasta después de 71 años de gobierno de un mismo partido (Partido Revolucionario Institucional, PRI) y la transición a una nueva ideología política (Partido Acción Nacional, PAN) se buscó un cambio de régimen, políticas y visión que el país llevaría a partir del 2000. Surge en la sociedad mexicana la inquietud, de contar con el acercamiento a lo que hacen las entidades públicas, quieren que se les informe, desean saber en qué se gasta, por lo que diversos sectores de la población se manifiestan exigiendo el tener el derecho de acceso a la información y es así como los ciudadanos comienzan con el planteamiento de las herramientas necesarias para tomar las decisiones sobre el gobierno que requieren, orientándolos a elegir una administración gubernamental que logrará una transparencia y rendición de cuentas como en sexenios anteriores no sucedía. Esta rendición de cuentas comienza en toda la estructura gubernamental y dependencias de gobierno que hasta entonces no se veían obligadas a hacer públicas sus acciones.

Una vez que inicia el interminable aun camino a la rendición de cuentas surge un término que cada vez cobra más presencia e importancia y que además juega un papel muy importante y es el de Servidor Público (SP), haciendo referencia a él debido a que se alude cada vez que se hace mención de algún servicio que tiene que proporcionar el municipio, el estado o la federación, y no es de extrañar que para muchos ciudadanos que habitan en este país hayan considerado echar un vistazo a la Constitución Política de los Estados Unidos Mexicanos, ya que en el Título Cuarto denominado "De las Responsabilidades de los Servidores Públicos y Patrimonial del Estado", establece:

Para los efectos de las responsabilidades a que alude este Título se reputarán como servidores públicos a los representantes de elección popular, a los miembros del Poder Judicial Federal y del Poder Judicial del Distrito Federal, los funcionarios y empleados, y, en general, a toda persona que desempeñe un empleo, cargo o comisión de cualquier naturaleza en la Administración Pública Federal o en el Distrito Federal, así como a los servidores del Instituto Federal Electoral, quienes serán responsables por los actos u omisiones en que incurran en el desempeño de sus respectivas funciones (Camara de Diputados del H. Congreso de la Unión, 2012)

Por lo expuesto anteriormente es importante conocer que ser SP no significa tener un cargo público sino cumplir con una serie de obligaciones establecidas en las leyes como son la Ley Federal de Responsabilidades Administrativas de los Servidores Públicos (LFRASP), la cual establece, entre otras cosas, las obligaciones que asumen una vez que ostentan la condición de SP, como lo son: *la legalidad, honradez, lealtad, imparcialidad, y eficiencia al desempeñar sus funciones, empleos, cargos y comisiones* (Camara de Diputados H. Congreso de la Unión Legislatura LXII, 2012) también describe el proceso a través del cual se llevará el registro patrimonial de los SP de la Administración Pública Federal.

El registro patrimonial del que se hace mención en LFRASP, deberá manejarse en un documento llamado Declaración Patrimonial (DP), la cual en términos jurídicos es *una manifestación bajo protesta de decir verdad de la información patrimonial que los servidores públicos de la Administración Pública Federal obligados a ello, presentan ante la Secretaría de la Función Pública.* (Secretaría de la Función Pública, s/f). Dicho documento debe ser presentado antes de que el SP, tome posesión de su cargo, y deberá actualizar la información contenida en el, en el mes de mayo de cada año siguiente a la toma de posesión del mismo y del año en el que finalice su gestión.

Por otro lado es importante hacer referencia a La Ley de Transparencia y Acceso a la Información Pública Gubernamental (LTAIPG), la cual juega un papel importante debido a que en ella se encuentra el fundamento de la garantía que tiene toda persona al acceso a la información, además de considerar la importancia que tiene la sociedad de poder contar con esta cada vez que la requiera.

#### **REVISIÓN DE LITERATURA**

La Revista Proceso publicó un artículo de Álvaro Delgado titulado "El PAN en el poder paga bien" el cual deja en entre dicho que algunos de los funcionarios públicos antes y después del sexenio encabezado por Felipe Calderón Hinojosa presidente de los Estados Unidos Mexicanos, tuvieron un aumento excesivo en el valor de sus nuevas propiedades, lo que desemboco en una exageración considerable de sus bienes, haciendo que mágicamente su riqueza se duplicara de la noche a la mañana.

Algunos de los más cercanos colaboradores de Felipe Calderón, miembros destacados del PAN, se cansaron de ser clasemedieros y decidieron aprovechar el sexenio para acrecentar sus patrimonios personales, en particular el inmobiliario. Sigilosamente empezaron a mudarse a casas más amplias, más confortables y con muchos más metros cuadrados de construcción, en zonas habitacionales de lujo de la Ciudad de México, como San Angel Inn, Bosques de las Lomas, Polanco, El Pedregal de San Ángel... Tienen un modelo a seguir: Germán Martínez, exsecretario de Estado, exdiputado, expresidente nacional de su partido y actual litigante de un bufete jurídico, vive en una residencia de más de 700 metros cuyo costo sobrepasa los 16 millones de pesos. Fabricante de pobres en su sexenio, Felipe Calderón es también productor de nuevos ricos del Partido Acción Nacional (PAN). (Delgado, 2012)

Conocido lo anterior se considera indispensable plantear los siguientes cuestionamientos:

- ¿Qué papel juega la Ley de Transparencia y Acceso a la Información Pública Gubernamental en los SP?;
- ¿Cumplen los SP, con lo establecido en la Ley Federal de Responsabilidades Administrativas de los Servidores Públicos, respecto a la obligatoriedad de publicación de la declaración patrimonial y su actualización?;
- > ¿Establece sanción para el SP al desacato de la ley?
- ¿Debería la LTAIPG establecer sanciones para el incumplimiento del ordenamiento en cuestión?
- ¿Establecen las leyes en cuestión alguna herramienta (auditoría) de comprobación de veracidad de lo incluido en dicha Declaración Patrimonial?

En los últimos años se ha conocido de distintos casos de enriquecimiento de los SP, sin que hasta el momento alguno de ellos este consignado por enriquecimiento ilícito o alguno de los delitos tipificados en la ley para este caso. Estas situaciones y la no muy definida entrada en vigor de la LTAIPG, dio origen al presente documento ya que se pretende hacer un análisis de ambas leyes, en relación con la declaración patrimonial y su seguimiento posterior a su presentación, lo que de por resultado propuestas de modificación o establecimiento de seguimiento según el resultado que se obtenga de dicho análisis.

En la actualidad el acceso a la información realmente se ha convertido en un tema de interés público, donde el gobierno mexicano ha realizado grandes esfuerzos por hacer de esto un derecho de cada ciudadano. En donde cada uno de los sujetos obligados a divulgar y dar a conocer la información que la ley le requiere, se compromete a que se haga en tiempo y forma. Entonces porque no toda la información de un SP, se hace pública. Existe una reglamentación en la que cierta información se encuentre protegida de ser publicada. Que sucede cuando un SP no acepta que se publique cierto tipo de información si se debe a la sociedad y es ella quién lo asigno a un cargo y es a quien le debe rendir cuentas.

Hablar de enriquecimiento ilícito por parte de SP, podría ser un tema demasiado amplio si se quisiera mencionar aquí la cantidad de delitos al respecto, por lo que el presente solo considerara el análisis de la LFRASP y de la LTAIPG en relación con la Declaración Patrimonial la cual será el objeto de estudio.

Conocer que la rendición de cuentas ha funcionado como un verdadero avance a la democracia en México, donde gobernantes y gobernados puedan confiar el uno del otro, o ¿aún existirán causas que impidan que se logre este fin a favor de la sociedad? Se puede definir que el fin de esta declaración patrimonial es verificar la evolución del patrimonio de los servidores públicos y la congruencia entre sus ingresos lícitos y sus egresos. (Secretaría de la Función Pública, s/f). Del cual el objetivo es parte de una obligación presente que los SP tienen.

#### METODOLOGÍA

El análisis aquí propuesto se llevará a cabo por el método descriptivo donde se estudiarán las características más importantes de la declaración patrimonial como herramienta de transparencia de los SP, Junto con el estudio de caso, como método de evaluación de transparencia en la información que un SP revela y hace pública. El estudio de caso como instrumento de investigación funcionará en el presente trabajo como ejemplo de la descripción del objeto de estudio de la transparencia en la DP, análisis de los antecedentes y el desarrollo que la problemática ha seguido. Como segundo punto ayudará al explicar la importancia que tiene el estudio de la DP como rendición de cuentas y fundamentará las posibles mejoras a la normatividad actual de México que regula. De acuerdo a las fuentes de información y al entorno en el que se efectúa el presente análisis se utiliza el método de investigación documental transversal, a la par del método comparativo de la Ley Federal de Responsabilidades Administrativas de los Servidores Públicos y la Ley de Transparencia y Acceso a la Información Pública Gubernamental, con estudio de las partes que cada ley regula sobre la transparencia que deben tener los SP y las posibles discrepancias que pudiesen existir entre hacer pública la información según estas reglamentaciones. Para la presente investigación se realizará una cédula de comparación entre las legislaciones de estudio, en la cual:

Primera columna se hará un vaciado de la totalidad de los artículos de la LFRASP y la LTAIPG;

Segunda y tercera columnas respectivamente se colocará una "X" en caso de que el artículo no aplique o aplique con la DP.

Cuarta columna se colocará la clasificación a la que pertenezca, de los siguientes conceptos:

Reglamentación en general,

Obligaciones de presentar la DP.,

Tiempo de presentación de la DP.,

Formatos de presentación,

Sanciones de incumplimiento de la DP.,

Auditoría a la información presentada en la DP.,

Transparencia y publicación de la información de su DP.,

Realizada la tabla anterior se calcularán estadísticamente la totalidad de los artículos de las leyes antes citadas, los porcentajes que corresponderán a una muestra del universo, que servirán como herramienta de análisis del presente trabajo. Obteniendo información que ayude en la comparación de la legislación actual dando a conocer resultado que sustenten las propuestas de modificaciones a la reglamentación. Es la LFRASP quien en su artículo 8 fracción XV señala que *los servidores públicos tienen la obligación de presentar la DP en el plazo que la ley la solicita, así como comprometiéndose a que se transmitan datos verídicos con la información requerida* (Camara de Diputados H. Congreso de la Unión Legislatura LXII, 2012).

Para el estudio de caso, se realiza el análisis de proceso del contralmirante Martínez Pastelín, quien actualmente desempeña el puesto de jefe de ayudantes en la Secretaría de Marina (SEMAR), con antecedentes de acumulación de bienes, como lo fueron departamentos y vehículos de lujo.

#### RESULTADOS

En base a sus DP de los últimos 5 años títulos de propiedad de bienes inmuebles, registros vehiculares y declaraciones patrimoniales de Martínez Pastelín, demuestran compras realizadas por él o sus hermanos a partir de ingresos no aclarados por millones de pesos. Se realizó el análisis de las Declaraciones Patrimoniales del Servidor Público del 2005 al 2012. Arrojando los siguientes resultados:

*Resultado 1:* Un SP debe seguir ciertos principios, entre los cuales la honradez de una manera demuestra que durante el periodo en que un SP cumple sus funciones en el gobierno no debe obtener ningún beneficio o ganancia para su persona o un tercero, además de no aceptar resarcimientos o ayuda alguna de una persona que haga comprometer su criterio o función pública; es entonces donde la DP surge como una herramienta para corroborar la relación ingreso-gasto de un SP en una manera congruente.

*Resultado 2:* Los ingresos por su cargo público han tenido un aumento en un 186.68% durante el periodo de 2005 a 2010 última declaración patrimonial que el SP Francisco Gerardo Martínez Pastelín, permitió se hiciera pública.

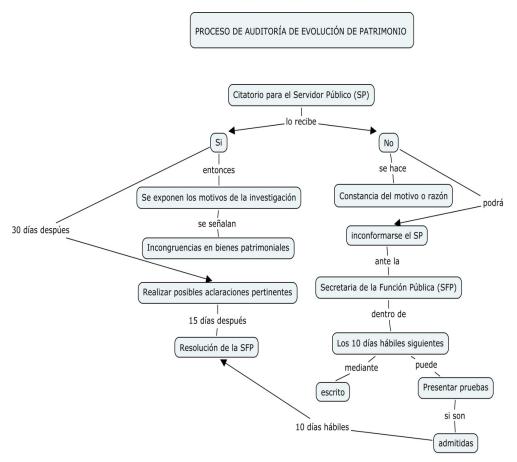
*Resultado 3:* Sus otros ingresos han tenido un aumento en un 579.13% del periodo comprendido de 2008 a 2010 el último año cuya información del SP, contenida en su DP se hizo pública.

*Resultado 4:* No obstante que se hizo la investigación documental de la DP del SP Francisco Gerardo Martínez Pastelín, de los años 2011 y 2012, la información no fue pública impidiendo que se pudiera comparar con datos de años anteriores.

*RESULTADO 5:* El análisis a sus bienes inmuebles de acuerdo a sus Declaraciones Patrimoniales del periodo 2009 y 2010, arroja que el 100% de ellos han sido por donaciones.

*Resultado 6:* Después del seguimiento documental que se ha realizado al caso, el proceso que la Procuraduría General de la República debió haber comenzado en la Unidad Especializada en Investigación de Delitos Cometidos por Servidores Públicos y contra la Administración de Justicia, adscrita a la Subprocuraduría de Delitos Federales.

#### TABLA 1: Proceso de Auditoría



#### Fuente: Propia

Se resuelve que el proceso no ha seguido el transcurso como el que la LFRASP señala en su artículo 42, por el contrario ha quedado como un caso sin consecuencias en la materia civil, ni un proceso legal que juzgue posibles delito o acto de corrupción por parte del SP. En base al análisis comparativo de la Ley Federal de Responsabilidades Administrativas de los Servidores Públicos y la Ley de Transparencia y Acceso a la Información Pública Gubernamental se aportan los siguientes resultados:

*Resultado 7:* De la totalidad de los artículos de la LFRASP el 51% están relacionados a la Declaración Patrimonial.

*Resultado 8:* La comparación entre las sanciones de incumplimiento de la DP, y las obligaciones de presentación son de diferencia de un 11%, es decir que hay tres veces más sanciones por cada obligación relacionada a la DP en la LFRASP.

*Resultado 9:* Del total de los artículos relacionados a la DP (51%) en la LFRASP tan sólo el 12% se relaciona a la auditoría que la autoridad correspondiente puede realizar a la información presentada.

*Resultado 10*: Dentro de la LFRASP analizada los artículos relacionados a la transparencia y publicación de la información de la DP tuvo un porcentaje nulo.

Resultado 11: Del conjunto de la LTAIPG sólo el 14% son conceptos relacionados a la DP.

*Resultado 12:* Sólo un 2% de la muestra representa obligación de presentar la DP, tres veces menos comparado a la LFRASP.

#### CONCLUSIONES

A pesar de que un SP tiene la obligación de proporcionar información especifica que la ley le señala como obligatoria, no toda la que esté en posesión estos sujetos es pública debido a que existe cierta sensibilidad de la información, esto quiere decir que el hecho de hacerla del conocimiento de la ciudadanía en general implica que se podría poner en peligro algún interés ya sea para el Estado ó para el particular que la proporciona, que pueden ser de carácter social, económico, político o jurídico, de acuerdo a la clasificación que la ley señala. Sin embargo, esto se ha convertido en un arma de la cual los SP hacen uso para poder protegerse de revelar a sus gobernados o a quienes les deben de prestar un servicio público, el derecho de conocer información sobre sus ingresos, adquisiciones de bienes ya sean muebles o inmuebles.

El costo de esta situación para un país hace reflejar que el avance a la democracia y la real apertura del acceso a la información se ve reducido, debido a que existen un número de clasificaciones o rubros en los cuales muchas situaciones que la ley no prevé son utilizadas como herramienta para proteger una supuesta intimidad de la cual tiene el derecho a ejercer, y que como en el estudio de caso planteado en esta investigación ha comprometido la veracidad que pudiera tener la información contenida en una DP.

En algunas situaciones, la privacidad de un SP se protege por no considerarse un tema de utilidad. No obstante lo que se exige no es conocer sobre su vida íntima, sino con el fin de evaluar su rendimiento y principios necesarios en su cargo. Logrando una verdadera evaluación objetiva del SP. Sin embargo mientras más alto sea el rango, más creen que deben de proteger sin lograr el objetivo principal del acceso a la información, no consiguiendo que el ciudadano pueda integrar su derecho.

Lo que la presente investigación hace reflejar es que a pesar de que ya está legislado el acceso a la información aún existen restricciones que no hace que este derecho sea completamente llevado a la práctica, lo que se recomienda a la autoridad competente es el reducir la privacidad, legislando de tal manera en que dentro de la Ley Federal de Responsabilidades Administrativas de los Servidores Públicos existan los conceptos y/o casos específicos de Transparencia Y Publicación de la Declaración Patrimonial de un SP.

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# RENDICIÓN DE CUENTAS EN LA INCAUTACIÓN DE BIENES EN MÉXICO

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#### RESUMEN

Desde que inicio el mandato del Lic. Felipe Calderón Hinojosa, como presidente de los Estados Unidos Mexicanos, uno de sus objetivos fue enfrentar a la delincuencia organizada de manera frontal, estableciendo distintos métodos para reducir la inseguridad, motivo de esto es la incautación de bienes que se hace a narcotraficantes en la mayoría de las detenciones, pero ¿cuál es el destino que estos tienen? El proceso se puede ejecutar de dos formas, una de ellas puede ser por parte de las autoridades administrativas federales y la otra mediante la Ley de Extinción del Dominio (LED), dictaminada por un juez, debido a la poca claridad en la información presentada al respecto es objetivo del presente documento efectuar el seguimiento de una incautación de bienes en su totalidad, en donde se haga la aplicación de la ley, se conozca que autoridades intervienen en dicho proceso, conocer la dictaminación correspondiente, así como la información que es presentada a la sociedad motivo del proceso. El resultado que se obtenga será utilizado para la propuesta ya sea de modificación de ley respectiva, propuestas de corrección a la forma operativa actual o corrección en las estructuras de los entes que intervienen en el proceso.

PALABRAS CLAVE: Incautación de bienes, transparencia, rendición de cuentas.

### ACCOUNTABILITY IN THE SEIZURE OF PROPERTY IN MEXICO

#### ABSTRACT

Since beginning the mandate of Mr. Felipe Calderon Hinojosa, as President of the United Mexican States, one of its objectives was to confront organized crime head-on, setting different methods to reduce uncertainty, reason for this is the seizure of property that is done in most drug arrests, but what is the fate that they have? The process can be run in two ways; one of them can be by federal administrative authorities and the other by the Dominion Act Extinction (DAE), issued by a judge due to the lack of clarity in the information presented about purpose of this paper is a follow up seizure of property fully, where then the enforcement, known to authorities involved in the process, knowing the corresponding dictamination, and the information that is presented to society reason for the process. The result obtained will be used for the proposed modification either relevant law suggested corrections to the current operably structures or correction in the structures of the entities involved in the process.

**JEL:** H83, K14

**KEYWORDS**: Seizure of assets, transparency, accountability.

#### INTRODUCCIÓN

El Gobierno Federal ha establecido distintos métodos para reducir la inseguridad que el país ha experimentado a lo largo de los gobiernos. Las líneas del narcotráfico han tomado en la última década mayor fuerza debido a la corrupción de funcionarios públicos, lo que imposibilita la efectividad de estrategias para combatirlo, una de las principales herramientas que ha utilizado el poder de la República,

para detener al crimen organizado es la incautación de los bienes, producto del delito, que son utilizadas para desempeñar actividades ilícitas. Los cambios constantes en las acepciones de delincuencia han propiciado que se proporcione un concepto distinto que define a la delincuencia organizada como:

Cuando con el transcurso del tiempo la delincuencia "común", llega a tal extremo de "evolución" o "perfeccionamiento"; cuando rebasa los límites de control gubernamental; cuando establece líneas especiales de operación basadas en un sistema complejo, tipo empresarial, bien estructurado en su comisión; cuando persigue a través de determinadas acciones violentas la búsqueda del poder, ya sea político, económico o social, es cuando podemos decir, sin lugar a dudas, que estamos frente a un caso de delincuencia organizada.(Procuraduría General de la República, 2012)

Por lo que la actividad de los criminales en las células de narcotráfico son: controlar un territorio extenso, considerado como mercado de distribución para administrar sectores de consumo del material penado. Al incurrir en esta práctica ilegal, la Ley de Adquisiciones, Arrendamientos y Servicios del Sector Público (LAASSP) de acuerdo al Artículo 71 establece que:

# La autoridad que conozca de la inconformidad la examinara y si encontrare motivo manifiesto de improcedencia, la desechara de plano(Legislatura, 2012)

Además es la misma autoridad quien tiene la obligación de hacer una investigación exhaustiva de la procedencia de los bienes, y en caso de encontrar anomalías, los bienes serán retenidos, caso contrario por falta de pruebas se procede a dejar sin efecto la ley. Ahora bien existen organismos para regular la transparencia que manejan los entes públicos en las actividades que realizan, como lo es el Instituto Federal de Acceso a la Información (IFAI), por medio del cual se dan a conocer las transacciones que el gobierno realiza en la materia. Cabe señalar que los organismos públicos deben ser transparentes en actividades ejecutorias de su índole, pero son ineficientes en materia de transparencia por falta de una adecuada regulación al respecto. En la sociedad contemporánea los ciudadanos tienen derecho a conocer el destino de los bienes al ser incautados, así como el fin que elige el gobierno para cada uno de ellos, otro aspecto relevante es el destino del recurso financiero obtenido por la venta de estos. La sociedad exige una rendición de cuentas confiable y veraz por parte del gobierno, sin burocratización, para la resolución de un derecho de petición para dar lugar al desarrollo de dichas ejecuciones, así como también dar a conocer el proceso referente de la situación legal de cada etapa de investigación.

Las medidas han sido tomadas y ejecutadas parcialmente, debido a que existen opiniones encontradas de la sociedad en relación con la supuesta existencia de burócratas coludidos con el narco, lo que hace ineficaz el cumplimiento de medidas establecidas por la autoridad en sus distintos niveles de Gobierno como lo son Municipales, Estatales y Federales. La incautación de bienes es la herramienta principal para retener y privar a los delincuentes de los bienes que tienen en su poder, mediante un proceso y averiguación por parte del Estado. El proceso se puede ejecutar de dos formas, una de ellas puede ser por parte de las autoridades administrativas federales y la otra mediante la Ley de Extinción del Dominio (LED), dictaminada por un juez. El tribunal es el encargado de definir en qué casos la autoridad administrativa puede hacer la incautación de bienes y el procedimiento que debe seguir para hacerlo mediante la función del Estado, siendo la Procuraduría General de la República (PGR) la que tiene la facultad de privar a los narcotraficantes del uso o goce de los bienes ilícitos, para cederlos a la Secretaría de Administración y Enajenación de Bienes (SAE). El resultado deseado es analizar y corregir la ineficacia de los organismos de divulgación de información al presentar de manera restringida los datos en las operaciones de incautación, además de la autorregulación en los organismos donde ellos se autoevalúan y de proponer métodos de regulación en las leyes vigentes. Ya que así lo marca la Ley de Transparencia y Acceso a la Información Pública Gubernamental (LFTAIPG). La democracia participativa se ha tornado como un dilema en los gobiernos desde épocas pasadas, donde efectivamente

no se logra concretar en su totalidad, según críticas sociales, los individuos al exigir el cumplimiento de la democracia, hacen referencia a la transparencia que conlleva la veracidad de los hechos.

Por otro lado el estado de derecho tiene como finalidad regular las relaciones entre los gobiernos y la sociedad gobernada, además de dirigir, calificar y controlar las actuaciones públicas donde el estado delimita el poder de influencia y ejerce los derecho al cual es acreedor y la sociedad respeta el poder facultado de la institución pero sabe ejercer lo que este compete. La transparencia está inmersa en el Estado de Derecho, para que puedan existir las regulaciones adecuadas para propiciar una rendición de cuentas efectiva, esta pretende comprender dos puntos que son la razón principal: el poder público y proteger los derechos del hombre(Cossio, 2008)

Los analistas suponen que de manera implícita y explicita la transparencia conlleva a la rendición de cuentas. La transparencia del estado y la privacidad del ciudadano constituyen dos caras de la misma moneda. Evocar el poder de la luz solar parece muy intuitivo y convincente. Sin embargo la evidencia empírica en que podría fundarse la supuesta identidad entre transparencia y rendición de cuentas no la demuestra. Este supuesto confunde lo normativo.

Con respecto a la transparencia las reflexiones conceptuales respectivas provienen de una investigación empírica realizada en los ámbitos nacional e internacional acerca de varias reformas a favor del derecho a la información pública. La investigación consiste en no utilizar herramientas prácticas para sus impactos en el comportamiento entre instituciones públicas y compararlos entre ellos. Pero el fin común entre ambas es de la divulgación de información acerca del órgano gubernamental.

Cuando se hace referencia al acceso público a la información acerca del desempeño del estado, los instrumentos generalmente siguen dos caminos principales: la difusión proactiva y la divulgación responsiva. La primera se refiere al acceso a un nivel mínimo de divulgación acerca de las funciones y desempeño. Mientras la divulgación responsiva se refiere a un compromiso institucional que responde a demandas ciudadanas especificas que solicitan cierta documentación que, por otra parte, generalmente no se difunde. (Fox, 2008)

Los organismos que son evaluados están obligados a presentar en internet la información para que sea divulgada de manera adecuada y sean transparentes en la rendición de cuentas. Cabe señalar que algunos no la presentan de tal manera. Además de que existe información que no ha sido revelada pero que se encuentra a disposición del público cuando este lo solicite de acuerdo con los requerimientos de la institución a la que se le requiera. Después de la cuestión de la disponibilidad vienen los programas sobre la confiabilidad de la nueva vertiente de evaluaciones externas, dichas evaluaciones son comisionadas por los mismos organismos y ellos determinan la metodología a utilizar para lograr la función, lo cual se traduce como la falta de divulgación de información por parte de los entes debido a que desempeñan actividades de índole sensible para su presentación. Las actividades de evaluación no se deben autoevaluar, sino que existe un consejo que se encarga de ellos llamado, Consejo Nacional para la Evaluación. Las agencias gubernamentales especializadas en ello, se encargan de inspeccionar, fiscalizar y verificar, reclamos de actores sociales o civiles externos a las instituciones. Algunas agencias solo se encargan de revelar la información dentro del mismo organismo en función de la estructura del organigrama corporativo, es decir, dejan la información recabada a disposición de la gerencia para que presente la información convenientemente y no le cause problemas.

Las comisiones gubernamentales de los derechos humanos cuyos impactos tangibles en término de rendición de cuentas no son medibles, dada la imprecisión en torno a la relación entre la frecuencia y las violaciones, la representatividad de quejas. La consistencia de las recomendaciones oficiales y la calidad de las respuestas institucionales. Una agencia a pesar de ser buena las actividades que le dan origen, tiene

deficiencias debido a la falta de planeación así como escases de personal con conocimientos técnicos y específicos, el cual recurrentemente no presta la atención necesaria a los ciudadanos para que disfruten de los servicios que la misma les brinda, en consecuencia existen demasiadas quejas y denuncias por incumplimiento ciudadano. Se puede afirmar entonces que la transparencia es utilizada para evitar la corrupción y hacer efectiva la rendición de cuentas, mediante la intervención de dos partes una que reforma y la otra que fiscaliza, aunque en algunos casos la información suele ser manipulada por las sinergias que existen entre ambas partes y con mutuo consentimiento se da a conocer la información conveniente para los dos criterios. Por lo anteriormente expuesto y debido a la poca claridad en la información presentada al respecto es objetivo del presente documento efectuar el seguimiento de una incautación de bienes, en su totalidad, en donde se haga la aplicación de la ley, se conozca que autoridades intervienen en dicho proceso, conocer la dictaminación correspondiente, así como la información que es presentada a la sociedad motivo del proceso. El resultado que se obtenga será utilizado para la propuesta ya sea de modificación de ley respectiva, propuestas de corrección a la forma operativa actual o corrección en las estructuras de los entes que intervienen en el proceso.

#### MÉTODOS Y MATERIALES

Para dar elaboración al artículo es necesario señalar los métodos que se emplean para llegar al resultado. En primer término se emplean la investigación documental debido a la naturaleza de la investigación, además se utiliza el análisis de caso para analizar detalladamente la noticia que se selecciona, además se emplea la investigación descriptiva y comparativa, por último se utiliza el análisis de contenido para detallar el objeto de estudio que conviene.Para efecto de llevar a cabo el seguimiento aquí propuesto se ha seleccionado una nota informativa acerca de un caso en particular. En la que se hará un análisis de caso para dar un seguimiento aplicado de la LFTAIPG y de la LFAEBSP. La nota tiene el nombre de: "Revelan dialogo al parecer de juez y alcalde para repartir bienes incautados" que consiste en la presunta divulgación de una conversación entre dirigentes del gobierno de Zapopan, Jalisco, pero se señala a otra persona que participa en la conversación que es un candidato a la alcaldía, por parte del Partido Revolucionario Institucional (PRI), además señala que intervino un magistrado aun no identificado, por otra parte en la conversación involucran al entonces al jefe policial.

Mientras en la segunda conversación se dan instrucciones por parte del magistrado para hacer la privación de los bienes propiedad del Chapo Guzmán. Al exjefe policial fue detenido en el 2011 por manejar una camioneta blindada que había sido robada, donde resultó baleado junto con su hermano.(Terra, 2012) Es por ello que el gobierno mediante el análisis de la gran inseguridad que el país ha experimentado, implementa la transparencia como herramienta para rendir cuentas ante la sociedad por la facultad que a él concierne. Debido a que es de gran necesidad analizar la LFTAIPG y LFAEBSP ya que se encuentran grandes fallas para la manera de divulgar la información, además de que en algunos casos la incautación se hace errónea, de tal manera se hace una descripción y comprensión de las leyes señaladas.

El procedimiento requerido para estructurar el análisis de contenido del objeto de estudio, consta de varios etapas secuenciales, que son en primer lugar: seleccionar los artículos de la LFTAIPG que tengan relación con el objeto de estudio, dicho análisis se forma mediante la creación de un cuadro donde se establecen comparaciones entre lo que la ley obliga y los resultados del gobierno ante esto, en materia de transparencia, después se analizará la LFAEBSP en otra tabla y se retomarán los artículos correspondientes en materia de incautación, para ser analizados de acuerdo al proceso que las autoridades federales siguen al hacer un decomiso. Al final se creará una cédula informativa que en base a las dos anteriores leyes, emitirá un resultado de las evasiones del gobierno en las mismas, así como proporcionar una opinión objetiva del caso. El proceso mediante el cual se efectuara el estudio consiste en el diseño de una cedula en donde se analizan y determinan los artículos de la LFTAIPG que se pueden aplicar de acuerdo al objeto de estudio, además de explicar el contenido respectivamente. Esta estructura constará de cuatro columnas que a continuación se detallan:

Columna 1: En esta columna se plasman los artículos de la ley en cuestión.

*Columna 2:* En la siguiente se relacionara la aplicabilidad total de lo que el artículo rige, a manera que se establece en tres niveles de determinación, es decir, entre mayor relación contenga a la presentación de información se considera como total, si la relación es tenue se considera parcial, por último, en caso de reflejar información de nula trascendencia se considera como nulo.

*Columna 3:* En esta se establece el contenido del artículo que ha sido elegido para aplicarse de acuerdo a la incautación de bienes.

*Columna 4:* Por último en este apartado se explicará de manera breve la forma en la que algunas autoridades han presentado la información o actúan incongruentemente a manera que se retomará en el apartado de resultados.

Los criterios básicos para filtrar los artículos de esta ley, son en base a la referencia que estos presenten en la información, de acuerdo al cumplimiento y relación con la incautación de bienes, de tal manera se aplican los correspondientes, a medida que solo se describan los que están relacionados. En la siguiente cedula se describe la LFAEBSP donde se hace un análisis de contenido para aprobar los artículos que sean convenientes en el seguimiento del caso y que sean aplicables, el primer paso es aprobar los artículos correspondientes mediante la comprensión de todas las divisiones de esta ley, después se procede clasificarlos de acuerdo a las regulaciones que se establecen en la ley para determinar más adelante la amplitud o carencia que cada rubro controla y hace mención, con el fin de hacer especulaciones de las posibles fallas. Para su elaboración constará de cuatro columnas que se describen a continuación:

*Columna 1:* Se anotan todos los artículos correspondientes a esta ley para ser clasificados y aprobados, o de manera contraria serán desaprobados

*Columna 2:* En la siguiente se designa la clasificación de cada uno de acurdo a lo establecido en la ley.

Columna 3: En esta serán plasmados los que sean aprobados, lo anterior haciendo uso de los índices de auditoría

*Columna 4:* En la cuarta y última columna al igual que en la anterior haciendo uso de los índices, se descartan los que no sean aplicables de acuerdo al objeto de estudio.

Una vez completado el proceso de comparación y análisis de las leyes en ambas tablas, se hace una cédula para señalar los actos omitidos del Gobierno al realizar la incautación de los bienes, mediante la supuesta corrupción entre algunos órganos burocráticos que dan servicio a la sociedad, para efecto de solucionar el problema que agrava y dificulta llevar a cabo dicha actividad, esta consta de dos partes: La primera de ellas será describir las ocasiones en que la autoridad incurre en la omisión de lo que establece la LFTAIPG, de tal manera que se proporcionará un resultado en la misma cedula, que dará opción a mejorar la técnica de llevar a cabo dicho proceso En la segunda parte se describirán de manera general las omisiones de la autoridad encargada de hacer el decomiso de acuerdo a lo que señala la LFAEBSP. Por último, el resultado final se asignará en la parte inferior del documento en la que de manera general se emitirá una opinión objetiva del análisis del caso, ya que se hace un señalamiento de posible corrupción en los órganos internos del gobierno. Esto con el fin de resolver paradigmas del caso.

#### RESULTADOS

Los resultados se presentan de acuerdo al análisis de cada tabla y gráfica complementaria elaborada, que contienen la razón de la investigación, además son necesarias para darle interpretación a la ley correspondiente. Por lo que dichos resultados se presentan mediante la numeración de cada uno en base a los criterios, de manera que se presentaran primero la información contenida en los cuadros y por último la información de las gráficas. Para dar comienzo a la presentación de resultados primero se interpretan los datos obtenidos en la LFTAIPG al realizar el análisis correspondiente

- 1. Del la totalidad de los 64 artículos de la ley, solamente son aplicables de acuerdo a nuestro objeto de estudio 3 de ellos que se sitúan en la primera columna de la tabla.
- 2. La falta de artículos relacionados en materia de transparencia son realmente insuficientes por lo que se imposibilita la efectividad de las autoridades al presentar información.
- 3. Debido a la carencia de los artículos las autoridades correspondientes incurren en omisiones a dicha ley.
- 4. De acuerdo a la tabla elaborada solamente se presentan los tres artículos seleccionados presentan información parcial sobre el tema que respecta a la incautación de bienes. Por lo que hacen referencia a la disposición general de la incautación de bienes y no están relacionados intrínsecamente.
- 5. La última columna refleja el actuar de las autoridades en la manera de presentar dichas disposiciones de la ley. En función al análisis de caso hecho previamente realizado, del caso seleccionado se interpreta que el gobierno realmente no presenta información suficiente para comprobar que realmente se es eficaz en la transparencia.
- 6. En la grafica elaborada de dicha ley se puede apreciar que solo el 4.69% son aplicados parcialmente y el resto 95.31% no se aplican por la discrepancia que existen en cuanto al enfoque seleccionado.

La tabla número 1 de la LFTAIPG refleja de acuerdo a su contenido, la falta de artículos en materia de transparencia relacionada con la incautación de bienes, además que son de aplicación general o parcial al proceso que conviene estudiar y de acuerdo al caso que se analiza, la aplicación de la transparencia no es visible ya que se habla de una posible repartición de bienes entre distintos poderes por la línea de la corrupción. En base a la tabla número 2, donde se analiza la LFAEBSP, se obtienen los siguientes resultados de la selección y clasificación de los artículos que pueden ser aplicados al caso seleccionado. Para presentar los resultados se asigna una letra del alfabeto para darle secuencia a la presentación de información.

- a) En la tabla correspondiente en la primer columna se conglomeran los artículos que pueden ser aplicados, siendo un total de 40 artículos aplicados
- b) equivalente al 44.44% el cual es una cifra importante en la aplicación de los mismos ya que pueden existir menos lagunas en dicha ley
- c) El porcentaje más elevado recolectado en las tablas y en gráficas, son los artículos que no aplicados de acuerdo a la desaprobación en la LFAEBSP siendo 53.33% que equivale a 48 artículos. Cifra que no es muy notoria con respecto a los aplicados.

- d) Mientras que el 2.22% son los que ya están derogados en la ley correspondiente por lo tanto restan la aplicación y el porcentaje es correspondiente solo a dos artículos, lo que hace la reducción de artículos, ya que se encuentran concentrados en algunos apartados correspondientes de cada artículo.
- e) De acuerdo a la gráfica 1 de los artículos aplicados se encuentra los siguientes porcentajes:
  - 1. Disposiciones generales 2.22%
  - 2. De la administración de bienes 14.44%
  - 3. De la devolución de bienes en administración 3.33%
  - 4. De los procedimientos de enajenación 1.11%
  - 5. De la asignación y donación 2.22%
  - 6. De la venta 2.22%
  - 7. De Licitación pública 2.22%
  - 8. De la subasta 1.11%
  - 9. Del remate 2.22%
  - 10. De adjudicación directa 1.11%
  - 11. De la devolución de bienes 5.55%
  - 12. Del SAE 5.55%

Además en la gráfica número 2 se obtienen los artículos que no son desaprobados al caso, obteniéndose los siguientes resultados.

- 1. Disposiciones generales 2.22%
- 2. De la administración de bienes 6.66%
- 3. De la devolución de bienes en administración 3.33%
- 4. De los procedimientos de enajenación 2.22%
- 5. De la venta 4.44%
- 6. De Licitación pública 6.66%
- 7. De la subasta 2.22%
- 8. Del remate 12.22%
- 9. De la devolución de bienes 2.22%
- 10. Del SAE 11.11%

Una vez analizado los procedimientos de cada tabla y gráfico descrito en la actividad lo siguiente es la interpretación de la cédula, la cual brinda un informe general de las incurrencias de las autoridades en el proceso de incautar bienes, dado que se encuentran grandes disfuncionalidades en materia de transparencia y de incautación. En la primera parte de la cédula se concentran todas las omisiones que en base al caso seleccionado presentó el gobierno burocrático, que como son significativas y no se debería incurrir en ellas. A continuación se muestran algunas de las omisiones encontradas por parte de la autoridad en cuanto a la presentación de información.

En primer término no se informó al SAE de las actividades que se realizan, por lo que la transparencia se ve afectada por los organismos que supuestamente son corruptos, además a la sociedad no se le presenta la información completa de la incautación de bienes que fue realizada en el periodo, los montos de dinero encontrados en la propiedad no son revelados por lo que se puede interpretar como repartición de efectivo entre los encargados de la realización del decomiso, por otro lado las averiguaciones previas no son

presentadas. Las personas que conforman la sociedad tienen derecho de exigir a su gobierno la rendición de cuentas pero se ve afectada por indisposición de las autoridades al exigirla.

Por otra parte de acuerdo a la LFAEBSP la forma de administrar los bienes por parte de las autoridades correspondientes es totalmente errónea ya que estos mismos son los que se encargan de repartirlos para beneficio propio y no social como está establecido, por lo que se acusa de corrupción entre los órganos facultados para hacerlo. En el caso se hace mención a la intervención de las autoridades municipales las cuales no tienen la facultad ya que intervienen los poderes federales correspondientes para hacerlo, es posible que intervengan autoridades que no son facultadas para realizar dicha actividad pero debe existir un documento comprobatorio y elaborado con previa anticipación para tener el poder de hacerlo, el cual no se encuentra por lo que hace una omisión a la LFTAIPG.

En el 'último apartado de la cédula se provee una resolución parcial al caso que engloba aspectos de intervención de las autoridades correspondientes para hacer el decomiso, una administración adecuada de los bienes que están en averiguación, uso o goce correcto de los mimos, lo cual conlleva a que se presente la información a la sociedad que lo exige de lo que se destina a cada bien, es decir, presentar una rendición de cuentas de las actividades de las autoridades para evitar caer en corrupción, al mismo tiempo de ser presentada la información el gobierno está en actos de transparencia.

#### CONCLUSIÓN

El Gobierno a través del tiempo ha presenciado grandes cambios estructurales de manera interna y externa, debido al crecimiento de las necesidades de la población, la nueva reorganización se concentra en la burocracia ineludible, es decir, han cambiado de manera vertiginosa las actividades que realizan los funcionarios públicos, y de acuerdo a modelos estructuralistas cada actividad la han simplificado de manera que sigue un proceso sistemático para obtener atención Gubernamental. Los Gobiernos son representativos sociales y órganos de función, que establecen un correcto orden en la sociedad y satisfacen las demandas de los gobernados de manera democrática igualitaria, ante la sociedad civil.

El sistema de autoridad por parte del gobierno se ve severamente influenciado y afectado por la burocracia existente en el, ya que imposibilita la resolución de actos que están penados por la ley, debido a la ineficacia de los organismos, el tiempo de respuesta para cada acción se ve aplazado y de importancia mínima. Dentro de la misma entidad en base a la burocracia, la estructura es de suma importancia para la rendición de cuentas y transparencia, ya que depende de las autoridades funcionales para presentar información correctamente y dicha información debe ser aprobada para su divulgación en los distintos medios. Por ello el estado de derecho propone regular la participación entre el gobierno y la sociedad que es gobernada, por lo que se debe respetar el poder que ha sido otorgado a la autoridad y la facultad que tiene para hacer las actividades sobre la voluntad. Por otro lado la transparencia está inmersa en dicha facultad que el estado posee y que debe respetar para el cumplimiento con la sociedad.

Dentro de esto surgen dos vertientes donde se concentra el problema que enfrenta el gobierno al presentar información la primera es la burocracia ineludible en el organismo facultado, que está intrínsecamente relacionado con la funcionalidad del organismo, el personal que labora dentro del mismo y como base fundamental la estructura orgánica, dichos factores siguen un proceso sistemático ya que por la inadecuada funcionalidad de uno se dañan los siguientes. El personal que labora es de suma importancia debido a que debe ser adaptado al puesto y conocer la entidad para la que presta su servicio con el conocimiento previo puede exigir los derechos que a él convengan y uno de ellos es exigir información a la organización ya que se suele presentar transparencia interna, es decir, solo se rinde cuentas dentro de la organización. Por otra parte la falta de artículos relacionados con la transparencia en la incautación es realmente un grave problema. Debido a dicha escasez se originan grandes lagunas en el gobierno porque lo que no da un cumplimiento total a lo que se exige en la ley, además que solo lo hace de manera parcial

o manipulada por los medios encargados de divulgarlo. La LFTAIPG tiene como fin que la rendición de cuentas se presente adecuadamente, ya que la sociedad debe saber lo que su gobierno realiza y la manera en que lo hace, pero en primera instancia existe un gran problema que es la corrupción en algunos sectores de la autoridad, hecho que daña la transparencia. Por lo que es conveniente hacer una reforma a dicha ley para que pueda existir una congruencia entre gobierno y sociedad.

El problema de la burocracia se agrava constantemente por vínculos que existen entre las divisiones y no existen muchos remedios tangibles considerados que se puedan realizar para evadir o disminuir esta, por lo que es conveniente estudiar a fondo dicha ley para descubrir las grandes fallas que presenta en relación a decomiso de bienes. Con dicha reestructuración es posible lograr un cambio tanto al exterior como al interior del organismo, de tal manera que se establezca una democracia cooperativa entre el gobierno y sociedad para efecto de evitar la autorregulación.

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# GESTIÓN DE CERTIFICACIÓN DE CALIDAD COMO FACTOR DE COMPETITIVIDAD EN EL SECTOR INDUSTRIAL DE MANUFACTURA, EN LA REGIÓN TRANSFRONTERIZA CD. JUÁREZ, CHIHUAHUA, MÉXICO-EL PASO, TEXAS, USA

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#### RESUMEN

La competitividad en las organizaciones hoy en día se basa de una manera importante en la calidad de sus productos o servicios que ofrecen al consumidor final (el público en general). Es por eso que este trabajo se enfoca en la administración de las certificaciones de calidad especialmente en el sector de la Industria Manufacturera en la región Ciudad Juárez, Chihuahua, México-El Paso, Texas, USA. Las certificaciones que se analizarán son el ISO-9000 y TS-16949 que son las que se utilizan primordialmente en la Industria Automotriz. La investigación incluirá la revisión de la planeación estratégica, el liderazgo directivo en calidad, la participación del recurso humano, la educación en calidad del recurso humano, las compensaciones con enfoque de calidad, el enfoque al cliente, la documentación y evaluación del sistema de calidad y la falta de estrategias de planeación en las organizaciones. Se tomarán en cuenta las diferentes opiniones de expertos en la materia, en el uso de herramientas para incrementar la competitividad, por medio de la certificacion del sistema de gestión de la calidad en las organizaciones. Se propone una estrategia que nos permita analizar en qué medida la adopción de un Sistema de Gestión de la Calidad tiene efecto sobre la capacidad competitiva y el rendimiento de dos empresas que serán comparadas en este trabajo. Se espera que los resultados de esta investigación muestren el comportamiento de los diferentes departamentos de la organización en lo que se refiere al uso de las certificaciones de calidad. Basados en los resultados se propondrá, si fuera necesario, el uso de algunas medidas que permitan la eficientización de los procesos de certificación, así como la implementación de un sistema de calidad que permita a la organización ser competitiva.

**KEYWORDS:** Certificaciones, competitividad, sector manufactura industrial

## QUALITY MANAGEMENT CERTIFICATION AS A COMPETITIVE FACTOR IN THE INDUSTRIAL MANUFACTURING AREA IN THE JUÁREZ, CHIHUAHUA, MÉXICO-EL PASO, TEXAS USA REGION

#### ABSTRACT

Nowadays competitiveness in the organizations is based, in a significant way, in the quality of the products or services that they offer to the end customer. It is for this reason that this paper focuses in the management of quality certifications, especially in the Manufacturing Industry area in the region of the city of Juárez, Chihuahua, Mexico-El Paso, Texas, USA. The quality certifications that will be analyzed are ISO-9000 and TS-16949, which are the ones that are used primarily in the Automotive Industry. This research will include the revision of the strategic planning, the top management leadership in quality, the involvement of the human resource, the quality training of the human resource, the compensations focused on quality, the client focus, the documentation and evaluation of the quality system and the lack of planning strategies in the organizations. We will consider the different opinions of the experts in the field and in the use of quality tools to increase competitiveness by means of certification of the quality

management system in the organizations. We also propose a strategy that will let us analyze to what degree the adoption of a Quality Management System has an effect over the competitive capacity and the performance of two firms that will be compared in this paper. It is expected that the results of this research show the behavior of the different departments of the organization with respect to the use of quality certifications. Based on these results we will suggest, if it is necessary, the use of some measures that will permit the efficiency of the certification processes, as well as, the implementation of a quality system that will allow the organization to be competitive.

KEYWORDS: Certifications, competitiveness, industrial manufacturing area

#### INTRODUCCIÓN

Como en la mayor parte del mundo, en México la globalización ha generado no solo cambios en la economía, sino también en el comportamiento de los mercados. Al contar con los clientes con mayores opciones de compra se vuelven más selectivos y buscan obtener el mejor producto, con las mejores condiciones y el mejor trato. Las empresas manufactureras han adoptado una perspectiva global en sus actividades de manufactura basándose en los principios de producción flexible realizando alianzas para acceder a nuevos mercados, algunos factores identificados para definir los cambios en eficiencia y competitividad de las empresas de autopartes son:

- Calidad. El 100% de estas empresas cuenta con algún tipo de certificación de calidad como son ISO9000 y TS 16949 que es la certificación específica de la industria automotriz en Norteamérica.
- Sistemas JIT. El sistema tiene muchos matices y opera según las necesidades.
- Incremento en la escala de producción.
- La automatización de la producción e investigación y desarrollo tecnológico
- Capacitación de la mano de obra.

Este sector manufacturero ha evolucionado paralelamente a las necesidades del cliente porque sabe que el servicio al cliente, constituye una nueva forma de competitividad siendo la calidad en el servicio una variable crítica para poder competir en el mercado, esta se ha considerado como uno de los asuntos más importantes en el mundo de los negocios en la actualidad. El objetivo es cumplir los requerimientos del cliente y cerciorarse de que todos los procesos de la organización contribuyan a satisfacer sus necesidades. Si los clientes están satisfechos con el producto y los estándares de servicio obtenidos, el cliente regresará una y otra vez. Para ser competitivo en el mundo actual hay que brindar bienes y servicios de alta calidad. Ciudad Juárez es una de las localidades de mayor dinamismo económico en la frontera norte de México y es sin duda la ciudad de mayor actividad económica en el estado de Chihuahua. (Carrillo, Miker y Morales, 2001Los problemas que enfrenta este sector de la industria superan en complejidad a otras ramas por la combinación de tres factores:

gran número de componentes, alto volumen de producción y altos estándares de calidad. La industria ha generado una variedad de estilos de organización para responder a esta complejidad, entre las que destacan tres elementos para la estructuración y simplificación de la cadena productiva: la Agrupación de componentes en sistemas, que se utiliza para clasificar a los componentes. Existen algunas investigaciones en las que se busca indicar e identificar cuáles son los factores que afectan la implementación y funcionamiento correcto de las estrategias de calidad. Tales investigaciones siguen una estructura sistemática y se busca realizar análisis y mediciones en las que se mencionan diferentes problemas tales como: La planeación estratégica, El liderazgo directivo en calidad, La participación del calidad, El enfoque al cliente, La documentación y evaluación del sistema de calidad y La falta de estrategias de planeación. El contar con un sistema de calidad para cumplir los requerimientos del mercado y no como una herramienta que ayude a mejorar la productividad o competitividad tampoco es

una opción adecuada. Las experiencias de países como Brasil o Argentina, que cuentan con industrias que han hecho el esfuerzo de certificarse y que han caído ante la competencia, demuestran que la obtención de una certificación ISO 9000 no es el remedio. Esto ocurre porque la implementación de un sistema de calidad, se debe usar como una herramienta para minimizar los errores de producción.

El contar con procedimientos e instructivos de trabajo, con proveedores calificados, con un buen sistema de compra y con acciones correctivas, permite evitar la pérdida de materiales, tiempos muertos, multas por atrasos y otros costos que además, pueden impedir que los ejecutivos puedan conocer efectivamente, cual es su costo de producción. Lo que más dificulta el trabajo, una vez que se ha tomado la decisión de implementar un sistema de calidad, es definir lo que queremos hacer. Esto normalmente origina un exceso de documentos que crean trámites, formularios y firmas innecesarias que finalmente demeritan el sistema ante los usuarios, convirtiéndolos en los primeros en estar en contra del cambio.

#### Planteamiento Del Problema.

En la literatura sobre la importancia de un Sistema de Gestión de Calidad (SGC) se exponen problemas típicos y complejos tales como, una cultura laboral con bajo nivel de enfoque hacia el mejoramiento, las estrategias de planeación estratégica gerencial, las decisiones de no inversión en tecnología de punta e informática, etc., en donde se observa la ausencia relevante de tomar la certificación del SGC como un factor de competitividad en las organizaciones. Otro problema que se presenta es la falta de consenso entre autores y expertos sobre sus contenidos teóricos, lo que dificulta la selección de las metodologías para la implementación de una Certificación del SGC; por lo que hay que identificar las metodologías más apropiadas, realizar un rastreo de variables e integrar esos contenidos en una función de agregación que indique el valor o utilidad del plan. En la industria local de manufactura hav organizaciones que se están certificando en SGC con resultados operativos de eficiencia bajos, aunado a esto, la falta de información y documentación de fallas y causas-raíces ocurridas; lo que explicaría la práctica común de tomar decisiones sin considerar factores estratégicos y cualitativos dentro del desarrollo de SGC. Por ello, es necesario desarrollar un modelo de estrategias de SGC y evaluar sus efectos en una posición competitiva dentro del sector industrial, con una revisión y actualización de acuerdo a los avances tecnológicos dentro del ramo de la manufactura y evitar la incongruencia de una inversión con bajos resultados operativos.

#### **Objetivos**

## Objetivo general

Diseñar una metodología más efectiva que la práctica generalizada para la obtención de una Certificación en el SGC en el sector de manufactura.

Objetivos especificos:

- Identificar los métricos de cada empresa.
- Evaluar los métricos de servicio al cliente.
- Evaluar los métricos de desempeño interno.
- Evaluar métricos de auditorías al sistema de calidad.
- Identificar la estrategia de calidad de la empresa.
- Hacer un comparativo de los sistemas de calidad y métricos de desempeño

Se pretende conocer el impacto que la administración de los sistemas de calidad tiene en el desempeño de las empresas mediante sus métricos, considerando los internos y externos. Además de analizar sus

estrategias de calidad que cada empresa ha definido con el fin de encontrar áreas de mejora y resaltar las estrategias que coadyuvan a obtener el éxito o fracaso de las empresas.

### **REVISIÓN DE LA LITERATURA**

Impacto Competitivo de las Herramientas Para la Gestión de la Calidad: De acuerdo a (Heras, Marimon, & Casadesús, 2009) las empresas estudian las herramientas para la gestión de la calidad en la competitividad de las organizaciones, tomándose como referencia los modelos del ISO 9001:2008 y el modelo de autoevaluación EFQM (Fundación Europea para la Gestión de Calidad). Para tal efecto se analiza la información proveniente de un estudio empírico en el que participaron 107 evaluadores de modelos de gestión de la calidad basados en la norma ISO 9001:2008 utilizan mayoritariamente herramientas de propósito general, diseñadas para el análisis de su situación y para extraer propuestas de mejora, lo que tiene un impacto relativamente positivo en su competitividad. Por otra parte, las organizaciones que adoptan el modelo EFQM utilizan herramientas más especializadas y focalizadas, lo que les lleva a una mejora notable en aspectos más concretos de su capacidad competitiva.

El enfoque hacia la gestión de la calidad que se toma como referencia puede condicionar el tipo de herramientas que se utilizan. También proponen que se debe continuar analizando el impacto del paradigma de la calidad en las organizaciones desde la perspectiva no solo de los directivos involucrados en su adopción, sino también desde la perspectiva de otros agentes involucrados

#### Gestión De Calidad En Documentos.

De acuerdo a (Pinto, 1998), la calidad es una filosofía, una manera de operar y se ha convertido en una obsesión colectiva del mundo desarrollado, eminentemente complejo, plural y dinámico. El documento trata de profundizar en el origen de procesos documentales, como gestores de los servicios de información donde se divide en entorno de la documentación en procesos, productos, servicio y valor, donde el usuario se convierte en el centro receptor del conjunto del servicio recibido, es por eso que se ven a los servicios de información de información con índices de operatividad y eficacia bajos y que toda la información de la gestión de calidad total no sea suficiente es por eso que en los sistemas de información la calidad es un problema de orientación de liderazgo de participación de los empleados y de formación y que en cualquier caso, la mejora de la calidad es un proceso sin fin, que debe llevarse paso a paso y del que no se pueden esperar resultados inmediatos.

#### Indicadores De Calidad.

Cualquier modelo se compone de características, atributos y métricas, conviene definir estos componentes para ubicarse en un marco específico. (Vallecillo 1997) describe una característica de calidad como un conjunto de propiedades mediante las cuales se evalúa y describe la calidad de un producto. Un indicador de una empresa es una medida cuantitativa que refleja la cantidad de calidad que posee dicha actividad. Por tanto, sirve no sólo para evaluar un determinado aspecto de la calidad del servicio, sino para realizar un seguimiento de dicha medida a lo largo del tiempo y poder compararla en diferentes periodos de tiempo, o entre diferentes centros de un mismo sector en el mismo periodo de tiempo. Para elegir los indicadores que se comparan en este documento los indicadores deben tener carácter sistemático, esto es, que la medición debe tener las mismas fases; normalizado, cualquier responsable de la medición deberá obtener siempre la misma medida, homogéneo, las unidades de medida deben ser siempre las mismas y continuas, es decir a lo largo del tiempo. El modelo de gestión debe presentar una visión de globalización y estar orientado al Cliente según la filosofía de Calidad Total, y a ser posible según principios basados en modelos de excelencia empresarial. Todos los sistemas de gestión tienen requisitos que inciden en la

planificación de los mismos. A continuación se presentan algunos puntos en los que se ve claramente el por qué necesitamos integrar los Sistemas de Gestión en un solo sistema certificable y finalmente, se expone una breve reflexión de cada uno de los escritos analizados. El sistema de gestión de calidad ha de implantarse con el fin de lograr que la empresa sea más competitiva a nivel global, dado que los clientes en el mundo actual son más exigentes y selectivos, y ya no importa sólo la calidad del producto.

También se deben considerar los costos de calidad, ya que "la identificación y cálculo de los gastos por concepto de calidad, constituyen un elemento para el análisis de la eficiencia y eficacia en el proceso de mejora continua, en la gestión de la calidad del servicio, como soporte representativo en la toma de decisiones por la dirección de la entidad", por lo que, puede decirse que los costos de calidad pueden servir como indicadores para que la empresa tome decisiones que la lleven a una mejor estrategia que le permita mejorar su posición en el mercado.

Algunos autores como (Carrillo, 1989) describe uno de los mayores retos de la modernización en México es lograr alcanzar niveles de competencia internacional. Es común señalar que esto se logra no sólo produciendo más, sino sobre todo mejor; y con más calidad, no depende exclusivamente de los materiales utilizados o del método para organizar la producción, entre otros, sino del esfuerzo del propio trabajador. En este contexto, el factor humano cobra nuevamente mayor importancia para explicar el éxito o no, en el uso de tecnologías flexibles. El objetivo de mejoramiento de la calidad de los productos es, quizás, la estrategia central de las corporaciones para lograr mejores niveles de competitividad.

Es importante que se entiendan las ventajas que trae consigo la implementación de un sistema de calidad, así como una certificación por parte de ISO, además de saber que no solamente ayudará a la empresa en el logro de los objetivos, así como el aumento de la satisfacción al cliente, sino que si se lleva de manera adecuada el sistema de gestión de calidad, podría representar la reducción o eliminación de algunos costos, como lo menciona Melgoza (2006) "los dueños de las empresas… pueden pensar que el implementar un SGC (Sistema de Gestión de Calidad), y después certificarse, tiene un alto costo que no es recuperable, sin embargo no aprecian que en el trabajo cotidiano realizan una serie de gastos fijos para garantizar el cumplir con las especificaciones solicitadas por el cliente, así como otro tanto (muy significativo) para resolver las fallas que por falta de una adecuada metodología de trabajo se tienen en el trabajo cotidiano". Las organizaciones deben tomar conciencia de que el no tener un SGC es en realidad más caro, hablando a largo plazo, que el gasto que representa la inversión en la certificación.

Mientras que para las grandes empresas el requisito de buscar una Gestión de Calidad en Certificación de ISO's es importante, algunos expertos encuentran que una certificación no influye significativamente en el desempeño de las organizaciones al no demostrarse su conexión con resultados de mejora reales como lo mencionan Martinez, (2009) y Terziovzki (11997). Por otro lado otros expertos Sousa & Aspinwall (2010) ponen de manifiesto que para lograr una mejora en el sistema de calidad, es necesario monitorear todas las áreas de la organización, haciendo énfasis en la importancia de crear un sistema de medición del desempeño Salunke (2011) enfatiza la importancia que tiene el proceso de mejora continua en las organizaciones que ya han sido certificadas en ISO's, donde se pueden ver mejoras en la satisfacción del cliente hasta del 14% y un desempeño del 5.23% en competitividad, calidad, costos y productividad acorde a Naveh &Marcus (2005)

## METODOLOGÍA

El objetivo de esta parte de la investigación es proponer una metodología, que nos permita analizar en qué medida la adopción de un Sistema de Gestión de la Calidad tiene efecto sobre la capacidad competitiva y el rendimiento de dos empresas que serán comparadas en este trabajo. Ambas empresas han adoptado el ISO 9001:2008 como su sistema de calidad, ya que la calidad se presenta hoy en día como un

sinónimo de buena Gestión Empresarial, lo que se traduce en productos y servicios competitivos. Esta parte está dividida en tres apartados:

Se dice que un producto o servicio es de Calidad, cuando cumple las Expectativas del Cliente, pero en la práctica, la Calidad es algo más; es lo que sitúa a una empresa por encima o por debajo de los competidores, y lo que hace que, a mediano o largo plazo, ésta progrese o caiga en la obsolescencia. Para el desarrollo de este proyecto se identificaron dos empresas: una dedicada al ramo automotriz y otra al de iluminación. La forma en que las empresas gestiona la calidad, en un entorno cada día más incierto tiene importancia estratégica.

A continuación se muestra la encuesta utilizada para efectos de este trabajo la cual está basada en los diferentes puntos de la norma ISO 9001:2008. Este cuestionario fue aplicado a los diferentes departamentos de las dos organizaciones elegidas para este análisis: Producción, Calidad, Ingeniería, Almacén e I&D. En una de las empresas se lograron obtener cinco encuestas mientras que en otra solamente obtuvimos cuatro. Esta encuesta fue enviada mediante correo electrónico aleatoriamente a los integrantes de los diferentes departamentos de las organizaciones. Como ya se mencionó el cuestionario que se elaboró para efectos de este análisis está basado en los puntos auditables de la norma ISO 9001:2008, los cuales se muestran a continuación: 4.0 Sistema de Gestión de la Calidad; 5.0 Responsabilidad de la dirección; 6.0 Gestión de los recursos; 7.0 Realización del producto; 8.0 Medición, análisis y mejora. Las preguntas del cuestionario están divididas de la siguiente manera:

Tabla 1: Listado de Preguntas y Clausulas de la Norma

Pregunta	Clausula de la Norma
5, 6, 7	Sistema de Gestión de la Calidad
1, 2, 3, 4, 9, 10	Responsabilidad de la Dirección
8, 14, 15, 16, 17, 20, 34, 35	Gestión de Recursos
22, 23, 24, 25, 26, 28, 38, 39, 40	Realización del Producto
27, 29, 30, 31, 32, 33, 36, 37	Medición análisis y mejora

La evaluación del cuestionario propuesto se evaluará de acuerdo a los siguientes criterios de calificación, empleando una escala de 0 al 4 con las siguientes descripciones: 0 Prácticamente no se realiza; 1 Se realiza parcialmente; 2 Se realiza generalmente; 3 Se realiza sistemáticamente y en casi todas las áreas; 4 Se realiza siempre y de forma total, y somos un ejemplo para el sector. Una vez aplicado el cuestionario se procede a la cuantificación de los puntos totales contando las (x) de cada columna, después serán multiplicadas por los puntos que se indican, se suma y obtiene el total de puntos. Al final se calcula el porcentaje dividiendo el total de puntos entre 1.6. Utilizando la siguiente tabla para vaciar los resultados.

Tabla 2: Tabla para Captura de Resultados de Encuesta

	0	1	2	3	4
Total de (X)	0*	1*	2*	3*	4*
Suma total de puntos obtenidos Resultado (ST/1.6)					(ST) %

Después de obtener los resultados finales se concluye de acuerdo a los siguientes rangos en porcentaje de valoración. Cada uno de ellos se describe detalladamente en los siguientes párrafos.

*Menos de 40 por ciento:* El sistema global de calidad con respecto al modelo ISO 9001:2008 no se cumple, se cumple en aspectos parciales o tiene una fidelidad muy baja con las actividades realmente

realizadas, y deben tomarse medidas correctoras urgentes y globales para implantar un sistema de calidad eficaz.

*Entre 40 y 60 por ciento:* El sistema global de calidad se cumple, pero con deficiencias en cuanto a documentación o a la continuidad y sistemática de su cumplimiento, o tiene una fidelidad deficiente con las actividades realmente realizadas. Se deberán solucionar las deficiencias urgentemente, para que el sistema sea eficaz.

*Entre 60 y 85 por ciento:* El sistema global de calidad se cumple, pero con leves deficiencias en cuanto a documentación o a la continuidad y sistemática de su cumplimiento, o respecto a la fidelidad con las actividades realmente realizadas. Se deberán solucionar las deficiencias a corto plazo, para que el sistema no deje de ser eficaz. Su tendencia hacia la Gestión de la Calidad es muy positiva. Les sugerimos analicen sus puntos sobresalientes y apliquen medidas similares a los temas con más baja puntuación.

*Más de 85 por ciento*: Su empresa se gestiona de acuerdo con el modelo ISO 9001:2008, y son ejemplo para otras empresas del sector.

## **RESULTADOS Y CONCLUSIONES**

En esta parte se presentan y analizan los resultados obtenidos después de contabilizar las encuestas aplicadas en las dos empresas elegidas para el presente proyecto. El análisis se llevará a cabo de acuerdo a los rangos de valoración mencionados en la sección anterior.

### **RESULTADOS OBTENIDOS**

Los resultados mostrados a continuación son mostrados primeramente por la empresa y sus respectivos departamentos. Seguidos de un gráfico de barras que nos permite ver de una manera más clara como se encuentra el sistema de gestión de calidad en general dentro de las plantas.

	0	1	2	3	4
Total de (X)	0	3	11	21	5
	0*	1*	2*	3*	4*
Suma total de puntos obtenidos Resultado (ST/1.6)	0	3	22	63	20 108 (ST) 67.5 %

Tabla 3: Resultados de Empresa Ramo Iluminación Resultados departamento Calidad

**Nota.** En la evaluación de la encuesta realizada al departamento de calidad de la empresa dedicada al ramo de la iluminación se obtuvo un 67.5%, lo cual de acuerdo a los rangos de valoración significa que, el sistema de calidad se cumple, pero con leves deficiencias en cuanto a documentación o a la continuidad y sistemática de su cumplimiento, o respecto a la fidelidad con las actividades realmente realizadas. Se deberán solucionar las deficiencias a corto plazo, para que el sistema no deje de ser eficaz. Su tendencia hacia la Gestión de la Calidad es muy positiva. Sugerimos analicen sus puntos sobresalientes y apliquen medidas similares a los temas con más baja puntuación.

#### Tabla 4: Resultados de Empresa Ramo Iluminación Resultados departamento Producción

		0	1	2	3	4
	Total de (X)	2	5	12	21	0
		0*	1*	2*	3*	4*
		0	5	24	63	0
Suma total de puntos obtenidos						92 (ST)
uma total de puntos obtenidos	Resultado (ST/1.6)					57.5%

Tabla 5: Resultados de Empresa	Ramo Iluminación Resultados	departamento Ingeniería
r r r		

	0	1	2	3	4
Total de (X)	5	11	9	14	1
	0*	1*	2*	3*	4*
	0	11	18	42	4
Suma total de puntos obtenidos					75 (ST)
Resultado (ST/1.6)					46.87 %

Nota. En la evaluación de las encuestas realizadas a los departamentos de Producción e Ingeniería (Tabla 4 y Tabla 5) se obtuvieron un 57.5% y un 46.87% respectivamente, lo cual significa que el sistema global de calidad se cumple, pero con deficiencias en cuanto a documentación o a la continuidad y sistemática de su cumplimiento, o tiene una fidelidad deficiente con las actividades realmente realizadas. Se deberán solucionar las deficiencias urgentemente, para que el sistema sea eficaz.

Tabla 6: Resultados de Em	presa Ramo Ilum	inación Resultados	departamento Logística

	0	1	2	3	4
Total de (X)	10	22	7	0	0
	0*	1*	2*	3*	4*
	0	22	14	0	0
Suma total de puntos obtenidos					36 (ST)
Resultado (ST/1.6)					22.5 %

**Nota.** En la evaluación de la encuesta realizada al departamento de Logística se obtuvo un 22.5%, lo cual de acuerdo a los rangos de valoración significa que el sistema global de calidad con respecto al modelo ISO 9001:2008 no se cumple, se cumple en aspectos parciales o tiene una fidelidad muy baja con las actividades realmente realizadas, y deben tomarse medidas correctoras urgentes y globales para implantar un sistema de calidad eficaz.

#### Tabla 7: Resultados de Empresa Ramo Iluminación Resultados departamento I&D

	0	1	2	3	4
Total de (X)		1	5	21	13
	0*	1*	2*	3*	4*
		1	10	63	52
Suma total de puntos obtenidos					126 (ST)
Resultado (ST/1.6)					78.75 %

**Nota.** En la evaluación de la encuesta realizada al departamento de I&D se obtuvo un 78.75%, lo cual significa que el sistema global de calidad se cumple, pero con leves deficiencias en cuanto a documentación o a la continuidad y sistemática de su cumplimiento, o respecto a la fidelidad con las actividades realmente realizadas. Se deberán solucionar las deficiencias a corto plazo, para que el sistema no deje de ser eficaz. Su tendencia hacia la Gestión de la Calidad es muy positiva. Les sugerimos analicen sus puntos sobresalientes y apliquen medidas similares a los temas con más baja puntuación.

#### Tabla 8: Resultados de Empresa Ramo Automotriz Resultados Departamento de Calidad

	0	1	2	3	4
Total de (X)	0	0	1	11	28
	0*	1*	2*	3*	4*
	0	0	2	33	112
Suma total de puntos obtenidos					147 (ST)
Resultado (ST/1.6)					91.88 %

Nota. En la evaluación de la encuesta realizada al departamento de calidad de la empresa dedicada al ramo Automotriz se obtuvo un 91.88%, lo cual de acuerdo a los rangos de valoración significa que la empresa se gestiona de acuerdo con el modelo ISO 9001:2008, y son ejemplo para otras empresas del sector.

#### Tabla 9: Resultados de Empresa Ramo Automotriz Resultados departamento Producción

	0	1	2	3	4
Total de (X)	0	1	21	17	1
	0*	1*	2*	3*	4*
	0	1	42	51	4
Suma total de puntos obtenidos					98 (ST)
Resultado (ST/1.6)					61.25 %

	0	1	2	3	4
Total de (X)	3	1	8	28	0
	0*	1*	2*	3*	4*
	0	1	16	84	0
Suma total de puntos obtenidos					101 (ST)
Resultado (ST/1.6)					63.12 %

## Tabla 10: Resultados de Empresa Ramo Automotriz Resultados departamento Ingeniería

## Tabla 11: Resultados de Empresa Ramo Automotriz Resultados departamento Logística

	0	1	2	3	4
Total de (X)	0	0	6	17	17
	0*	1*	2*	3*	4*
	0	0	12	51	68
Suma total de puntos obtenidos					131 (ST)
Resultado (ST/1.6)					81.88 %

Nota. En la evaluación de las encuestas realizadas a los departamentos de Producción, Ingeniería y Logística (Tablas 9, 10 y11 respectivamente) se obtuvieron los siguientes porcentajes 61.25%, 63.12% y 81.88%, los cuales se pueden interpretar de la siguiente manera ya que oscilan entre el 60 y el 85%. El sistema de calidad se cumple, pero con leves deficiencias en cuanto a documentación o a la continuidad y sistemática de su cumplimiento, o respecto a la fidelidad con las actividades realmente realizadas. Se deberán solucionar las deficiencias a corto solorentata que el sistema no deje de ser eficaz. Su tendencia hacia la Gestión de la Calidad es muy positiva. Se sugiere analizar sus puntos sobresalientes y apliquen medidas similares a los temas con más baja puntuación.

## **CONCLUSIONES**

De la investigación realizada mediante una encuesta aplicada a los departamentos más representativos en dos organizaciones de diferentes ramos de la industria maquiladora, que han adoptado la gestión de la calidad según el estándar ISO 9001:2008. Se obtuvieron los siguientes resultados después de condensar las encuestas y analizar las preguntas por clausula de la norma ISO 9001.

## Industria Iluminación

A continuación se muestra un gráfico de barras el cual nos permite apreciar de una manera más clara como se encuentra al interior de la organización el Sistema de Gestión de la Calidad.

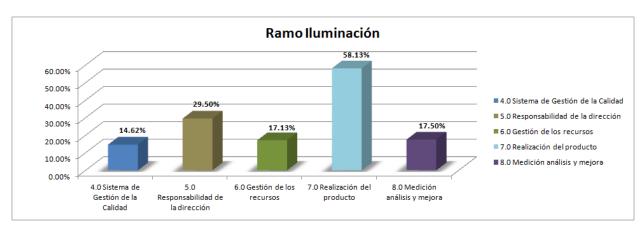


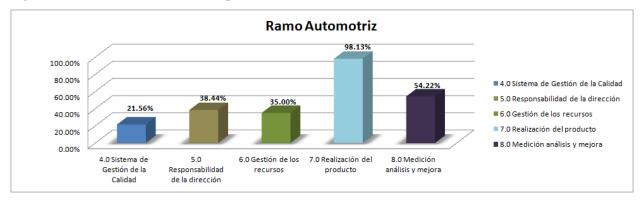
Figura 1: Condesado de Encuestas Aplicadas en Industria de Iluminación

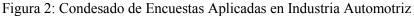
Como se puede observar en la Figura 1, la empresa del Ramo de la Iluminación requiere trabajar más en su Sistema de Gestión de la Calidad enfocándose principalmente en las clausulas 4.0 Sistema de Gestión de la Calidad, 5.0 Responsabilidad de la Dirección, 6.0 Gestión de los Recursos y 8.0 Medición, análisis y mejora. Ya que de acuerdo a los porcentajes obtenidos después de analizar el total de las encuestas se puede decir que: El sistema global de calidad con respecto al modelo ISO 9001:2008 no se cumple, se

cumple en aspectos parciales o tiene una fidelidad muy baja con las actividades realmente realizadas, y deben tomarse medidas correctoras urgentes y globales para implantar un sistema de calidad eficaz. Sin embargo se debe resaltar que el área en la que se muestra más fortaleza es en la correspondiente a la clausula 7.0 Realización del Producto, ya que se obtuvo un 58.13% en la evaluación lo cual significa que en este aspecto el sistema de calidad se cumple, pero con deficiencias en cuanto a documentación o a la continuidad y sistemática de su cumplimiento, o tiene una fidelidad deficiente con las actividades realmente realizadas. Se propone de una manera urgente aplicar un plan de acción, para que el sistema sea considerado eficaz.

### Industria Automotriz

El siguiente gráfico de barras nos muestra el condensado de las encuestas aplicadas en la Industria dedicada al Ramo Automotriz.





Como se puede observar a diferencia de la industria dedicada a la Iluminación en este caso tenemos porcentajes significativamente más altos sin embargo también requieren trabajar más en su Sistema de Gestión de la Calidad. Ya que como muestra la Figura 2 las clausulas 4.0 Sistemas de Gestión de la Calidad, 5.0 Responsabilidad de la Dirección y 6.0 Gestión de los Recursos están por debajo de un 40% en el rango de valoración de la encuesta utilizada para este análisis, lo cual significa que el sistema de calidad con respecto al modelo ISO 9001:2008 no se cumple, se cumple solo en aspectos parciales o tiene una fidelidad muy baja con las actividades realmente realizadas, y deben tomarse medidas correctoras urgentes para implantar un sistema de calidad eficaz. De igual manera se puede observar que en lo referente a la clausula 8.0 Medición, Análisis y mejora (54.22%) el sistema de calidad se cumple, pero con deficiencias en cuanto a documentación o a la continuidad y sistemática de su cumplimiento, o tiene una fidelidad deficiente con las actividades realmente realizadas. Sin embargo es importante resaltar que su fortaleza se encuentra en lo referente a la clausula 7.0 Realización del Producto, lo cual es bastante bueno ya que al dedicarse a la industria automotriz esto es de suma importancia y el porcentaje obtenido de 98.13% nos indica que la empresa se gestiona de acuerdo con el modelo ISO 9001:2008, y son ejemplo para otras empresas del sector.

## PROPUESTA

Después de la revisión realizada a los resultados obtenidos para ambas empresas se propone para la empresa de Iluminación trabajar con mayor énfasis en su sistema de Gestión de la Calidad (Sistemas de Gestión de la Calidad, Responsabilidad de la Dirección, Gestión de los Recursos, Realización del Producto y Medición, Análisis y mejora). Esto puede ser mediante entrenamiento en la norma ISO

9001:2008 al personal de la organización, hacerles saber la importancia de dar seguimiento al sistema, una mayor difusión de las políticas y objetivos de Calidad que la organización ha designado así como la importancia de vivirlas y llevarlas a cabo en el trabajo diario. Siempre enfocándose en el cliente y la mejora continúa.En el caso de la Industria Automotriz se recomienda seguir el mismo énfasis aplicado a las actividades referentes a Realización del Producto ya que como se pudo observar su fortaleza está en lo referente a ese apartado de la Norma. De igual manera que en el caso de la otra empresa analizada se sugiere llevar a cabo un plan de entrenamiento y seguimiento al sistema de Gestión de la Calidad ya que se cumple pero con algunas deficiencias en cuanto a documentación y continuidad las cuales se deberán solucionar a corto plazo, para que el sistema sea eficaz. Se sugiere analicen sus puntos sobresalientes y apliquen medidas similares a los temas con más baja puntuación.

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# ANÁLISIS DE LA CALIDAD DE LOS SERVICIOS RECIBIDOS EN LAS INSTITUCIONES DE EDUCACIÓN SUPERIOR

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## RESUMEN

Este trabajo presenta una investigación de tipo descriptivo, transversal con diseño no experimental sobre la calidad del servicio ofrecido por una institución de educación superior. Su objetivo consiste en evaluar la calidad del servicio mediante la satisfacción de los estudiantes con experiencias asociadas al conocimiento recibido y al contexto en que se recibe; para alcanzarlo se trabajó con una muestra de 200 estudiantes de una universidad multicampus. En la recolección de los datos se utilizó un cuestionario integrado por 41 ítems distribuidos en seis variables (Proceso enseñanza-aprendizaje, Servicios, Condiciones de las aulas, Logros personales, TIC empleadas en el proceso y Actitud del profesorado); su confiabilidad fue determinada a través del alfa de Cronbach, obteniendo un índice de confiabilidad de 0.95. Los resultados obtenidos revelan que los estudiantes están bastante satisfechos con los servicios que ofrece la institución, ya que el resultado global de la satisfacción alcanza un promedio de 136.09; no obstante el puntaje promedio, se detectó un 1.5% de estudiantes que se encuentran poco satisfechos.

PALABRAS CLAVE: Satisfacción del estudiante, calidad del servicio, instituciones de educación superior

## ANALYSIS OF SERVICE QUALITY RECEIVED FROM HIGHER EDUCATION INSTITUTIONS

## ABSTRACT

This study presents a descriptive, transversal research with non-experimental design on the diagnosis of service quality of higher education institutions in the Northwest of Mexico. The aim is to evaluate service quality by the student satisfaction with the associated experiences to their received education and to the context it is received; in order to reach it the work was done with multi campus university students. To come up with the data it was used a template with 41 items distributed on 6 variables (Teaching-learning process, Services, Conditions of the classrooms, Reached results, TIC employees in process and Attitude of the Teachers); whose reliability was determined through the Cronbach alpha, obtaining a 0.95 index. The results obtained indicate that the students are satisfied with the services that the institution provides, given the global result of satisfaction it has been reached an average of 136.09; nevertheless in the average result it has been detected a 1.5% of students that find themselves dissatisfied.

## **JEL:** I23

KEYWORDS: Student satisfaction, service quality, institutions of higher education

## INTRODUCCIÓN

El concepto de calidad en la educación superior ha evolucionado con el transcurso del tiempo. Hasta la década del 60 del siglo pasado, se presuponía la calidad basada en la tradición de la institución, en la exclusividad de los profesores, alumnos y recursos materiales; actualmente la situación es distinta porque el fenómeno de la globalización afectó sustancialmente esta concepción, ahora la sociedad está exigiendo una forma diferente de universidad, se exige que el conocimiento impartido sea aplicado a su entorno, que sea pertinente y genere un impacto positivo en éste (Águila, 2005).

Considerando que las instituciones de educación superior (IES) requieren de información sobre la calidad de los servicios académicos y administrativos que brindan y atendiendo al reto de la educación del siglo XXI: la búsqueda de la calidad, con el fin de establecer prioridades para orientar el mejoramiento interno de sus procesos educativos, se plantea el objetivo de este trabajo que consiste en evaluar la calidad del servicio ofrecido por una institución de educación superior mediante la satisfacción de los estudiantes con experiencias asociadas no solo al conocimiento recibido sino también al contexto en que se recibe. Para alcanzarlo se parte de una investigación empírica, no experimental y descriptiva, utilizando un instrumento de medición construido a partir del cuestionario empleado por Gentos y Vivas (2003).

El propósito del estudio es que una vez construido el instrumento pueda servir para describir los factores que, desde la percepción de los estudiantes, determinan la calidad de las instituciones de educación superior. La información obtenida será de gran utilidad para asegurar el mejoramiento continuo de la institución en donde se lleva a cabo el trabajo. La investigación se llevo a cabo en una institución pública de educación superior, tipificada como multicampus y temporalmente cubre el periodo 2012-1

## **REVISIÓN DE LA LITERATURA**

La satisfacción de los estudiantes con respecto a la educación que reciben en las IES es un buen referente en la valoración de la calidad de estas instituciones (Gento y Vivas, 2003). Sin embargo, en la actualidad no existe una definición unánimemente aceptada sobre este término; de hecho, cada investigador elabora su propia concepción según el objetivo de su trabajo. Existen autores como los citados por De la Fuente (2010) que consideran a la satisfacción como un antecedente de la lealtad del estudiante y por tanto, sostienen que ambos conceptos se encuentran estrechamente relacionados. Otra postura, y que son mayoría, consideran que en las universidades la satisfacción del alumno está vinculada al proceso educativo y en consecuencia, ésta tiene que ver con la calidad de la enseñanza (Gento y Vivas, 2003). Estos autores conciben que desde la percepción del estudiantado es posible evaluar la calidad de las instituciones universitarias (González, 2003, Hernández, et al., 2010 y Casero, 2010).

La mayoría de los estudios que existen en la literatura académica respecto al sector de los servicios giran en torno a la relación entre la calidad de los servicios y la satisfacción. Pocos estudios se han llevado a cabo para investigar la relación entre la técnica y dimensiones funcionales de calidad y el nivel de satisfacción de los estudiantes universitarios. Casi en ninguno de ellos se ha estudiado la repercusión de factores como la atmósfera, la infraestructura, la honestidad de los expositores del conocimiento en la calidad de la percepción y satisfacción de los estudiantes (Zineldin, et al., 2012). En este trabajo se aborda la calidad del servicio entendida como la capacidad de la IES para satisfacer las necesidades de sus estudiantes con base en 6 variables. Este modelo se basa en el supuesto de que el proceso enseñanza-aprendizaje, los servicios, la actitud del profesorado, las tecnologías de la información y comunicación (TIC), los logros personales y las condiciones de las aulas generan una mayor satisfacción en los estudiantes.

## METODOLOGÍA

Con la finalidad de alcanzar el objetivo propuesto, se realizó un estudio transversal caracterizado como descriptivo porque pretende especificar qué tan satisfechos están los estudiantes con la calidad de los servicios (Hernández et al., 2006). El universo de estudio se constituye por estudiantes de una universidad pública (multicampus) del estado de Baja California perteneciente a la región noroeste de la República Mexicana. La selección de los estudiantes se realizó a través de un muestreo por juicio, el cual se lleva a cabo a partir de criterios conceptuales definidos por el investigador (Mejía, 2000). Para la recolección de los datos se utilizó un cuestionario elaborado sobre la base del instrumento SEUE (Satisfacción de los Estudiantes Universitarios con la Educación) de Gento y Vivas (2003). Este instrumento se integra por 44 ítems distribuidos en ocho variables y cuya categoría de respuestas fue en escalamiento numérico de cinco valores, donde (1) corresponde a totalmente insatisfecho y (5) a totalmente satisfecho. La aplicación del instrumento se realizó en el transcurso del primer semestre 2012, la confiabilidad del instrumento se corroboró a través del  $\alpha$  de Cronbach el cual fue de 0.95.

#### RESULTADOS

El análisis de los resultados reveló que los estudiantes de la institución se sienten bastante satisfechos con los servicios que se ofrecen. La satisfacción de los estudiantes se muestra en la Tabla 1, en donde se observa que únicamente 1.5% (equivalente a tres) de los estudiantes están poco satisfechos con los servicios que se ofrecen en la institución.

Tabla 1: Nivel de Satisfacción de los Estudiantes de todos los campus	S
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	-	Frecuencia	Porcentaje
Poco Satisfecho		3	1.5
Satisfecho		69	34.7
Bastante Satisfecho		97	48.7
Totalmente Satisfecho		30	15.1
	TOTAL	199	100.0

En esta tabla describen las diferentes categorías de la Satisfacción Global de los estudiantes expresada en porcentaje

También se analizó la satisfacción de los estudiantes por campus de procedencia resultando que los estudiantes del campus Mexicali presentan el mayor grado de satisfacción respecto a los otros dos campus (Ensenada y Tijuana); aunado a esto, el análisis reveló que los 3 estudiantes identificados como poco satisfechos pertenecen al campus Tijuana. Para corroborar lo anterior se trabajaron los estadísticos descriptivos, encontrando que el promedio de puntaje en esta evaluación fue de 136.09 (Tabla 2) y que, efectivamente, los estudiantes del campus Mexicali presentan la satisfacción más elevada ( $\mu$ =146.39) y la más baja ( $\mu$ =130.44) los estudiantes que proceden del campus Tijuana.

Tabla 2: Estadísticos Descriptivos de la Satisfacción del Estudiante por campus

Campus	Media	95% Intervalo de confianza		Mediana	Varianza	Desviación	Mínimo	Máximo	Rango
		Limite Inferior	Limite Superior			Estándar			
Ensenada	132.33	125.79	138.87	127.00	585.298	24.193	92	206	114
Tijuana	130.44	124.06	136.82	130.50	822.553	28.680	61	193	132
Mexicali	146.39	140.22	152.56	146.50	609.543	24.689	101	203	102
SATISFACCIÓN GLOBAL:	136.09	132.31	139.87	136.00	732.901	27.072	61	205	145

Esta tabla describe para los diferentes campus de la IES la media, la desviación típica, los límites de intervalo de confianza para la media al 95% y los valores máximo y mínimo. Ahí puede evidenciar que las medias guardan entre sí una relación más o menos equivalente;

comparativamente el promedio más alto ( $\mu$ =146.39) le corresponde al grupo de los estudiantes del campus Mexicali mientras que, el más bajo ( $\mu$ =130.44) al grupo de los estudiantes que proceden del campus Tijuana.

Adicionalmente se analizó el nivel de satisfacción de cada una de las variables del modelo; los hallazgos se explican en los siguientes párrafos de acuerdo a la insatisfacción o poca satisfacción con la intención de ubicar las debilidades de la institución en materia de los servicios ofertados. En el caso de los Servicios ofertados que tienen relación con diversos aspectos académicos, tales como la asignación de becas, cursos intersemestrales, la vinculación con futuros centros de trabajo, la incorporación de nuevas tecnologías de la enseñanza, entre otros. Para el Proceso enseñanza-aprendizaje que únicamente el 2.0% de los estudiantes están poco satisfechos con éste, o cual significa que están satisfechos con forma en que la institución organiza este proceso. En relación a las Actitudes del profesorado el 8.0% de los estudiantes se encuentra poco satisfecho con respecto a la actitud y comportamiento del profesorado, en lo relativo a la asistencia a clase de los profesores, la orientación que reciben de éstos, la metodología de enseñanza aplicada, el sistema de evaluación y el nivel de exigencia.

En el caso de la variable de Logros personales, es poca la satisfacción al respecto puesto que solamente el 8.0% de los estudiantes se manifiesta en ese sentido; lo cual indica que el 92.0% están satisfechos con los conocimientos adquiridos, con las calificaciones obtenidas, con la información ciudadana alcanzada, con el dominio de técnicas y con el desarrollo personal. Sobre las Condiciones de las aulas, el 20.0% de los estudiantes asegura estar poco satisfecho con las condiciones presentan las aulas, eso significa que no están satisfechos en relación a aspectos tales como: la limpieza, la ventilación, los ruidos, la comodidad del mobiliario y las instalaciones sanitarias. Finalmente, respecto a la TIC empleadas en el proceso enseñanza-aprendizaje, el 10.5% de los estudiantes se encuentra totalmente insatisfecho o poco satisfecho con las TIC utilizadas y disponibles en la organización; esto es, existe cierto grado de insatisfacción el proceso de admisión, en el acceso a internet y al uso del correo electrónico, al acceso a computadores para realizar sus trabajos académicos.

## CONCLUSIONES

El propósito fundamental de estudio consistió en evaluar la calidad del servicio ofrecido por una institución de educación superior mediante la satisfacción de los estudiantes con experiencias asociadas no solo al conocimiento recibido sino también al contexto en que se recibe. La conclusión principal de este trabajo es que los estudiantes están bastante satisfechos con los servicios que ofrece la institución. El resultado global de la satisfacción alcanza un promedio de 136.09; no obstante el puntaje promedio, se detectó un 1.5% de estudiantes que se encuentran poco satisfechos.

En relación a la satisfacción de los estudiantes por campus de procedencia, se encontró que los estudiantes del campus Mexicali presentan un mejor nivel de satisfacción ( $\mu$ =146.39) respecto a los otros dos campus y el campus Tijuana se ubica en el menor nivel de satisfacción ( $\mu$ =130.44).

Respecto al grado de satisfacción de las variables estudiadas, la variable que presenta el menor nivel de satisfacción es la vinculada a las TIC ya que el 21% los estudiantes se encuentran totalmente insatisfecho o poco satisfecho con las tecnologías de la información y comunicación empleadas durante el proceso de enseñanza-aprendizaje y que se encuentran disponibles dentro de la organización. La variable detectada con el mayor nivel de satisfacción es el Proceso enseñanza-aprendizaje que únicamente el 2.0% de los estudiantes están poco satisfechos con éste, o cual significa que el 98% están satisfechos con la organización de este proceso.

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# CREENCIAS Y PRÁCTICAS DE LOS ESTUDIANTES Y PROFESORES DEL PROGRAMA DE INGENIERÍA INDUSTRIAL DE LA UNIVERSIDAD DEL MAGDALENA ACERCA DE LA EVALUACIÓN DOCENTE

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## RESUMEN

El presente estudio es de tipo descriptivo, se clasifica metodológicamente como estudio de caso; por su propia naturaleza no se pretende hacer generalizaciones ni validar teorías, pero si contribuir a ampliar, precisar y dinamizar la comprensión del fenómeno conceptualmente general y empíricamente común y particularizado; tiene como propósito describir las creencias, practicas y usos que estudiantes y profesores del programa de Ingeniería Industria de la Universidad del Magdalena tienen con respecto a la evaluación docente. Por medio de los resultados obtenidos se pretende caracterizar los diferentes enfoques o criterios que se tengan de la evaluación docente los cuales surgen de la propia experiencia estudiantil y docente. El estudio se realizará mediante un análisis correlacional. Este análisis permitirá establecer las diferentes perspectivas (creencias, criterios) de profesores y estudiantes de Ingeniería Industrial sobre la evaluación del desempeño docente.

PALABRAS CLAVES: Evaluación docente, creencias, prácticas, análisis correlacional,

## UNIVERSITY OF MAGDALENA INDUSTRIAL EDUCATION PROGRAM FACULTY AND STUDENT PERCEPTIONS AND BELIEFS REGARDING TEACHER EVALUTIONS

## ABSTRACT

This descriptive study is methodologically classified as a case study, by its own nature not intended make generalizations or validate theories, but if contribute to expanding, clarify and stimulate the General understanding of the phenomenon conceptually and empirically common and particularized; aims describe the beliefs, practices and usages that students and teachers of Industrial Engineering Program at the University of Magdalena have regarding teacher evaluation. By means of the results it seeks to characterize the different approaches or criteria to be taken of teacher evaluation which arise from the students and professors experience. The study will be performed through correlational analysis. This analysis will allow to establish the different perspectives (beliefs, criteria) of teachers and students of Industrial Engineering about teacher evaluation.

**JEL**: I20, I23, I29

KEYWORDS: Teacher evaluation, beliefs, practices, correlational analysis,

# PRODUCTIVIDAD: DETERMINACIÓN DE FACTORES QUE LA INCREMENTAN EN MIPYMES PROVEEDORAS DE LA INDUSTRIA MAQUILADORA DE EXPORTACIÓN

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## ABSTRACT

El presente trabajo es un estudio cuantitativo no experimental transeccional tipo correlacional – causal. Se analizan cambios ocurridos en las variables independientes (Calidad, Innovación, tecnología y financiamiento) en relación con la variable dependiente (Productividad). La muestra considerada para la investigación fueron 47 empresas proveedoras de la industria maquiladora de exportación, las cuales forman parte del catálogo de proveedores del Centro Nacional de empresas proveedoras "CENADEP" el cual consta de un total de 380 empresas Mipymes proveedoras de la industria maquiladora de exportación en Cd. Juárez. Para la investigación se aplicó un cuestionario tipo Liker el cual consto de 30 preguntas para medir las variables dependiente e independientes el cual se aplicó a través del CENADEP a las empresas seleccionadas, el cuestionario fue validado por expertos. La técnica aplicada fue el Coeficiente de correlación de PEARSON para evaluar la relación que guardan la variable dependiente con las variables independientes (calidad, innovación, tecnología y financiamiento) y así determinar el impacto de cada una de ellas en la productividad. Como resultado de la investigación se determinó que los factores Calidad, financiamiento y tecnología efectivamente tienen un impacto significativo en la productividad, no así la innovación que de acuerdo a los resultados del estudio no representa impacto alguno en la productividad en éste tipo de industria.

PALABRAS CLAVE: productividad, calidad, financiamiento, innovación y tecnología

## INTRODUCCIÓN

Los factores que influyen en la productividad de las empresas mexicanas son múltiples; la presente investigación se centra en los que están ligados a la productividad de las empresas MIPYMES exportadoras localizadas en Ciudad Juárez, Chihuahua y que proveen insumos a la Industria Maquiladora de Exportación. El presente trabajo de investigación se desarrolla con el fin de evaluar la correlación que tiene la productividad con los factores considerados como parte importante de la productividad. Cabe mencionar que existen muchos otros factores relacionados a la productividad sin embargo para este trabajo se consideran solamente los siguientes: calidad, innovación, tecnología y financiamiento. El objetivo es proporcionar información relevante a las MIPYMES exportadoras de Ciudad Juárez los factores que les ayude a enfocarse en los factores que les ayudarán a elevar su productividad y por lo tanto a ser más competitivas.

## **REVISIÓN DE LITERATURA**

#### Antecedentes históricos

La Organización para la Cooperación Económica Europea (OCEE) ofrece en 1950 una definición formal de la productividad como el cociente que se obtiene de dividir la producción entre uno de sus factores. De 1950 a 1995 se mantenía dos factores en común: la economía y producción. A principios del siglo XXI, un tercer factor: el humano. En este sentido, Hamburger (2008, citado por Viloria,2010) señala que cualquier intento por mejorar la productividad debe comenzar por reconocer el valor y la importancia de las personas en la organización.

De acuerdo a Porter (1990), La productividad es un elemento muy importante para elevar el nivel de vida de una nación, lo anterior es una causa radical de la renta nacional per cápita. Una alta productividad no sólo genera altos niveles de renta, sino que además proporciona a los ciudadanos la oportunidad de disfrutar de más tiempo para ellos y sus familias en lugar de trabajar largas jornadas en las empresas. El mismo autor menciona que las empresas de una nación deben mejorar considerablemente la productividad de los sectores existentes a través de la mejora de la calidad de los productos, la adición de características deseables, la mejora de la tecnología del producto o superación de la eficiencia de la producción. Debido a lo comentado anteriormente Porter, (1990) plantea que la productividad es un factor clave para elevar la competitividad de las MIPYMES mexicanas.

Por su parte García (1995), en relación a la productividad menciona que es "la conjugación de todos los factores que en ella participan y además éstos le permiten a las empresas continuar en el mercado". No se debe perder de vista que la productividad no depende de un solo factor como la producción, o sea, la simple productividad por hora-hombre u hora-máquina. La productividad tiene un alcance muy superior, pues abarca todas las actuaciones en todos los niveles de una organización y se extiende a la productividad total de una nación.

La Productividad comprende cuatro factores claves de éxito: Tecnología de punta, reducción permanente de costos de operación, mejoras en productividad por trabajador y programa de mantenimiento preventivo.De acuerdo a Volpentesta (2002), la productividad es el factor que define la competitividad y rentabilidad de las organizaciones y en lo particular a cada una de las empresas que en ella participan. Por ello es importante fomentar un enfoque integral que exprese la interrelación y la consecuente interacción de todos los aspectos que en las organizaciones generan productividad, con el objetivo de construir un marco de referencia que priorice una gestión general orientada hacia la productividad, pero que a su vez permita el estudio analítico de las cuestiones técnicas específicas que permitan maximizar la productividad total.

El primer factor y el más significativo de cualquier situación de productividad es la calidad: Comprende el análisis de cuatro factores: Implantación de Norma ISO-9000, materia prima de primera, inspección continua de calidad del producto terminado y empaque adecuado para proteger calidad del producto.

Volpentesta (2002) menciona que una parte importante de cualquier fase de la productividad es la calidad, ya que no representa ningún valor económico en el hecho de incrementar los niveles de producción, si dicho aumento está basado en una calidad inferior. Las empresas al medir la productividad, la producción a tomar en cuenta en esta medición deberá ser la de aquellos productos con aceptación de producción, esto es aquellos que están en condiciones de ser comercializados. Una organización está en posibilidad de lograr mejoras sustanciales en la productividad cuando la calidad es posible de ser identificada y de alguna manera, cuantificada dentro del proceso de medición de la productividad. El segundo factor que influye en la productividad es la tecnología, ya que la tecnología empleada en la dirección dentro del ámbito empresarial se expresa, entre otros muchos casos, a través de:

- 1) La consecución de un mayor volumen de bienes y servicios con menos recursos.
- 2) Un mejoramiento en la calidad de la operación y en los productos.
- 3) Mejora de nuevos procesos y métodos de producción.
- 4) Innovación de nuevas materia primas.
- 5) Automatización de los procesos fabriles.
- 6) Aumento de nuevos dispositivos de fabricación.
- 7) Reducción de los costos unitarios de los productos y por último,
- 8) Progreso en las condiciones de seguridad laboral (Volpentesta, 2002).

El tercer factor que interviene en aumento de la productividad es la innovación, ya que algunos de los nuevos aspectos económicos, entre los que se encuentran la gradual importancia que toman los factores "no precio" dentro de la lucha competitiva (servicios de preventa, venta u postventa, calidad de los productos y servicios, adecuarse a las exigencias de los clientes; la habilidad de diseño); la reducción de los ciclos de vida de los productos y de los ciclos de desarrollo de nuevos productos; la alta segmentación y personalización de los mercados; los procesos de comoditización de productos masivos así como marcados procesos de enfoque y marquismo. Todo lo anterior en su conjunto incide en el replanteo de los procesos innovativos implementados por las organizaciones empresariales (Volpentesta, 2002).

Finalmente el cuarto factor a considerar dentro de la presente investigación es el financiamiento ya que juega un papel muy importante en la productividad de las empresas, debido a que es un medio que ayuda a la empresa a financiar nuevas inversiones en mejoras dentro de la organización. Para que una administración arroje un aumento en la rentabilidad de la organización, debe operar con efectividad en todas las áreas, pues de lo contrario, es muy probable que estuviese desaprovechando el esfuerzo realizado por diversos sectores de la organización, o bien podría encontrarse ante una situación de equilibrio inestable que puede ser perjudicial en el mediano o largo plazo para la organización (Volpentesta,2002). Los factores antes mencionados son los que han considerado como parte fundamental de la investigación ya que están presentes en la productividad y competitividad de las empresas.

## Competitividad

En relación a la competitividad, Porter (1990), menciona que la ventaja que presenta un sector es consecuencia de la interacción autorreforzante de las ventajas en las diversas áreas que la componen. El sistema nacional que se tenga en el país es tan importante como las partes individuales de que se compone, o más. Dos elementos- la rivalidad doméstica y la concentración geográfica del sector tienen un poder especialmente grande para transformar el "diamante" en un sistema. La rivalidad doméstica porque fomenta el perfeccionamiento de todo el "diamante" nacional y la concentración geográfica porque eleva y magnifica las interacciones dentro del diamante. La existencia de empresas que compiten dentro del mismo sector genera rivalidad y eleva la notoriedad del sector. Debido a lo anterior se alienta la demanda primaria en el mercado interior. Y no sólo se incrementa la demanda interior, sino que la saturación se produce antes y da lugar a un esfuerzo más fuerte en aras de alcanzar los mercados internacionales.

#### La Micro, Pequeña Y Mediana Empresa

De acuerdo a la información publicada en el Diario Oficial de la Federación (2009) en relación al Acuerdo por el que se establece la estratificación de las micro, pequeñas y medianas empresas se establece que: Las micro, pequeñas y medianas empresas son un elemento fundamental para el desarrollo económico de los países, tanto por su contribución al empleo, como por su aportación al producto interno bruto constituyendo, en el caso de México, más del 99% del total de las unidades económicas del país,

representando alrededor del 52% del producto interno bruto y contribuyendo a generar más del 70% de los empleos formales. Acuerdo por el que se establece la estratificación de las Micro Pequeñas y Medianas empresas. (p. 1)

#### Empresas exportadoras

En lo referente a empresas Maquiladoras el gobierno Federal publicó las modificaciones al siguiente: Decreto para el Fomento de la Industria Manufacturera, Maquiladora y de Servicios de Exportación (IMMEX, 2010), en el Capítulo I, en sus Disposiciones generales menciona lo siguiente en relación a empresas exportadoras:

Artículo 1° El presente decreto tiene por objeto fomentar y otorgar facilidades a las empresas manufactureras, maquiladoras y de servicios de exportación para realizar los procesos industriales o de servicios de mercancías de exportación y para la prestación de servicios de exportación. (p. 1)

Debido a las publicaciones antes mencionadas se establece que las condiciones están dadas para que las empresas MIPYMES participen en el segmento Industrial y de servicios que se define en párrafos anteriores ya que representa la puerta de entrada para explorar nuevos mercados Internacionales.

#### Maquiladora

De acuerdo al portal de la Asociación de Maquiladoras (2011), en el estado de Chihuahua se localizan 476 empresas de las cuales 322 están asentadas en Ciudad Juárez. Así mismo la AMAC (2011) muestra el porcentaje de empresas por sector. La mayor proporción lo representan las empresas de giro automotriz con un 29%, le siguen el sector eléctrico con un 18%, las empresas de plástico, metal y empaque reflejan un 9%, en el caso de la industria del sector eléctrico se presenta en un 7%, las de call center con un 3% y otras no definidas con un 20%, como se refleja en la figura 2.3 En lo que se relaciona a la cantidad de insumos consumidos por la industria maquiladora el material de compra nacional representa un porcentaje de apenas 3.4 % en comparación al material importado del extranjero por la misma industria.

#### Index – Cenadep

## La Cultura De La Proveeduría Como Estrategia De Política Pública Para El Crecimiento Y Desarrollo Económico De México

De acuerdo a la información proporcionada por Aguirre, Palencia y González de la O (2012), a través del Centro Nacional de Desarrollo de empresas proveedoras, la Industria Maquiladora tiene su antecedente inmediato en México a mediados del año 1964, al ser suspendido el llamado Programa Bracero (Programa Nacional Fronterizo), constituido con el objetivo de: dar empleo permanente a los trabajadores temporales (braceros) que cruzaban la frontera para trabajar en los campos agrícolas de E.U. En el periodo del presidente López Portillo existían 585 maquiladoras en México.

Ya para el año 1983, Miguel de la Madrid expide el primer decreto para regular la operación de las maquiladoras en México. Sin embargo, en dicho desarrollo industrial el sector de exportación se encuentra desvinculado de la economía nacional en cuanto a la incorporación de insumos nacionales. En las cadenas de valor de los productos finales, ya que en términos absolutos sólo se incorpora un 3.4% de insumos mexicanos. Ante esta oportunidad, el Consejo Nacional de la Industria Maquiladora y Manufacturera del país llamada también la *Industria Global de México*, ha constituido desde el mes de febrero del año 2012, y después de más de 40 años de historia industrial el proyecto eje y rector nacional

de la proveeduría y las cadenas de valor por medio del Centro Nacional de Desarrollo de Empresas Proveedoras (INDEX-CENADEP) cuyo propósito fundamental está contenido en sus seis líneas de acción permanentes y que gravita en torno a diez objetivos específicos en áreas como la formación, certificación, estructuración, apoyo, evaluación y seguimiento de nuevos proveedores y de los ya existentes para la industria de exportación de México.

En INDEX NACIONAL se llevan a cabo actividades con base en normas internacionales, y esto posibilita que la industria maquiladora de exportación trabaje con estándares de calidad mundial, colocando con ello a México en la preferencia de Inversiones directas Internacionales. Con esta filosofía de avanzar y de contribuir como INDEX, se consolida el firme propósito de hacer del país altamente competitivo en el escenario internacional del comercio, con un crecimiento económico equitativo, incluyente y sostenido, capaz de reducir las diferencias económicas y sociales tanto internas como externas, y de brindar a cada habitante oportunidades de empleo e ingreso para una existencias digna, que permita a cada persona realizarse como tal y mejorar, de manera consistente, su nivel y calidad de vida.

## METODOLOGÍA

La presente investigación se basó en el método cuantitativo ya que se recolectaron los datos utilizando análisis estadísticos para comprobar la hipótesis de que "La falta de un sistema de calidad, innovación, tecnología y financiamiento en las Micro, Pequeñas y Medianas Empresa exportadoras propician la baja productividad". Se utilizó el diseño no experimental transversal o transeccional debido a que la evaluación se hizo en un tiempo dado y en un momento único, así mismo los datos se recolectaron por una sola ocasión a las empresas que se determinó como muestra. La muestra seleccionada fue por conveniencia a la población proporcionada por parte del Centro Nacional de Empresas Proveedoras. Por otra parte el estudio del análisis de los datos fue correlacional ya que se relacionó la variable dependiente con las variables independientes para ver la relación que guardaban entre ellas es decir el impacto que mostró la variable dependiente productividad con cada una de las variables independientes (calidad, tecnología, innovación y financiamiento).

Se utilizó el muestreo probabilístico por racimos ya que se enfocó solamente en las empresas MIPYMES. La población de referencia fueron las empresas MIPYMES exportadoras que proveen de insumos a la industria maquiladora en Ciudad Juárez. El total de la muestra para la presente investigación fueron un total de 47 empresas con las características antes mencionadas. El cuestionario aplicado a las empresas seleccionadas estuvo basado en el modelo tipo Likert el cual consta de 30 preguntas que se aplicaron a través del CENADEP a las empresas MIPYMES seleccionadas en particular a los directivos que estaban relacionados con la productividad de cada empresa para evaluar el grado de apreciación de cada una de las variables objeto del presente estudio. El coeficiente de correlación de Pearson fue la técnica que se utilizó para analizar la relación entre las variables y se calculó en base a las puntuaciones recolectadas por cada entrevista. La aplicación de la metodología utilizada en la presente investigación nos ayudó a proporcionar información de los factores que determinan la productividad de cada una de las empresas encuestadas.La encuesta se validó a través de expertos relacionados con el tema de la productividad solicitando que aportaran ideas u opiniones que enriquecieran el contenido de la encuesta y que esta fuera finalmente aplicada a las empresas seleccionadas.

## RESULTADOS

De acuerdo a las correlaciones obtenidas mediante el uso de la técnica de Correlación Pearson para cada variable se obtuvieron los resultados siguientes. Los resultados obtenidos arrojan que efectivamente la productividad se ve afectada con un impacto significativo de las variables calidad, innovación tecnología y financiamiento. Sin embargo el resultado obtenido también demuestra que los diferentes factores no son

afectados de la misma forma. Lo anterior debe ser considerado por las empresas MIPYMES al momento de evaluar sus prioridades de estrategia de negocio y planes de producción.

Es preciso mencionar que en la encuesta se presentaron las siguientes situaciones, por ejemplo el cuestionario se validó solo a través de expertos, por otra parte se encontraron algunas preguntas sesgadas que pudieran haber afectado de alguna forma el resultado arrojando correlaciones bajas. Sin embargo el resultado obtenido demuestra que los factores considerados para la presente investigación efectivamente presentan un impacto significativo en la productividad de las empresas.

Tomando en consideración que se deben cumplir con las siguientes características  $t^* > t(\infty/2, u-2)$ En base a lo anterior el factor de "Calidad" presento una correlación con respecto a la productividad de 0.4334, y un valor t = 3.22, por tanto se determina en base a los valores obtenidos que t = 3.22 > 2.01 por lo tanto se rechaza  $H_O$  y se comprueba que el factor de calidad aún y cuando presenta una correlación baja si tiene un impacto significativo en la productividad de acuerdo al estadístico de prueba realizado.

Para el caso del factor de "Innovación" presento una correlación con respecto a la productividad de 0.3079, y un valor t = 2.17, por tanto se determina en base a los valores obtenidos que t = 2.17 > 2.01 por lo tanto se rechaza  $H_O$  y se comprueba que el factor de innovación aún y cuando presenta una correlación sumamente baja con respecto a la productividad, en base a las pruebas estadísticas se comprueba que tiene impacto significativo en la productividad.

El factor de "Tecnología" presento una correlación con respecto a la productividad de 0.3154, y un valor t = 2.22, por tanto se determina en base a los valores obtenidos que t = 2.22 > 2.01 por lo tanto se rechaza  $H_O$  y se comprueba que el factor de tecnología aún y cuando presenta una correlación baja si tiene un impacto significativo en la productividad de acuerdo al estadístico de prueba realizado. Finalmente el factor de "Financiamiento" presento una correlación con respecto a la productividad de 0.3880, y un valor t = 2.82, por tanto se determina en base a los valores obtenidos que

t = 2.82 > 2.01 por lo tanto se rechaza  $H_0$  y se comprueba que el factor de financiamiento aún y cuando presenta una correlación baja este factor representa un impacto significativo en la productividad de acuerdo al estadístico de prueba realizado. Debido a lo anterior las empresas MIPYMES deben dar especial importancia a los factores antes mencionados para lograr el incremento de la productividad y así lograr que estas empresas sean altamente competitivas. Esto implica que los empresarios deben mejorar sus estrategias de negocio en el que tomen una especial importancia los factores antes mencionados.

## CONCLUSIONES

Con base a los resultados obtenidos en el presente estudio se concluye que las empresas MIPYMES exportadoras de Ciudad Juárez deben enfocar sus esfuerzos en fortalecer los factores que influyen en la productividad. Ya que en base a los resultados obtenidos éstos les ayudara a lograr la competitividad que el mercado global requiere y así logren ganar cuota de mercado. Fortaleciendo estos factores las empresas aprovecharan el potencial que representa la industria maquiladora de exportación y lograran aprovechar la oportunidad que representa el formar parte de la proveeduría para las empresas maquiladoras ya que lo anterior es un medio que les permitirá crecer, incrementar sus utilidades y lograr mejorar el nivel de vida de los empresarios y sus empleados. Lo anterior ayudará al logro de los objetivos fijados por las empresas y el gobierno mejorando la economía nacional.

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## LA INFLUENCIA DE LA ACTIVIDAD INNOVADORA EN LA ACTIVIDAD DE OPERACIÓN EN LA PYME DE AGUASCALIENTES PARA UNA MEJOR COMPETITIVIDAD EMPRESARIAL: UN ESTUDIO EMPIRICO

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## RESUMEN

Con el presente trabajo de investigación, aplicado a la Pequeña y Mediana Empresa (PYME), del sector Industrial, se pretende explicar si existe una relación positiva entre la actividad innovadora en la actividad de operación en la Pyme de Aguascalientes para una mejor competitividad empresarial, para ello, se aplicó un instrumento de evaluación dirigido a los gerentes donde los resultados obtenidos se han analizado con apoyo del paquete estadístico EQS donde a través de ecuaciones estructurales se ha dado respuesta al objetivo planteado. En este sentido, se puede concluir que la actividad innovadora tiene una relación positiva con la actividad de operación y a su vez, esta relación muestra un impacto positivo en la Competitividad de la PYME de Aguascalientes. Para esta investigación se ha utilizando una muestra de 150 empresas las cuales contienen de 5 a 250 trabajadores.

PALABRAS CLAVES: Actividad Innovadora, Operaciones, Competitividad, Pyme.

## THE INFLUENCE OF INNOVATIVE ACTIVITY IN OPERATING ACTIVITIES IN AGUASCALIENTES SMALL MEDIUM ENTERPRISES FOR A BETTER COMPETITIVENESS: AN EMPIRICAL STUDY

## ABSTRACT

In this research, applied to the Small and Medium Enterprises (SMEs), Industrial sector, we intend to explain if there is a positive relationship between innovative activity in the trading activity in the SME of Aguascalientes for improved business competitiveness for this, we applied an assessment tool intended for managers where the results have been analyzed using the statistical package EQS support where through structural equations has responded to the objective. In this sense, it can be concluded that innovative activity has a positive relationship with operating activity and in turn, this relationship shows a positive impact on the competitiveness of SMEs in Aguascalientes. For this study we have used a sample of 150 companies which contain 5 to 250 employees.

**JEL:** C01, D02, L06

KEYWORDS: Innovative Activity, Operations, Competitiveness, SME.

## INTRODUCCION

En la actualidad, las empresas del sector industrial de la pequeña y mediana empresa (PYME), se enfrentan con mayor frecuencia a diversos retos en los cuales se dependen de elementos de importancia como lo son las operación internas y de la actividad innovadora que se tenga implementada por parte de

los gestores ya que la demanda de productos cada vez es mas exigente en materia de calidad y de rapidez en el suministro. Por ello, la PYME para poder sobrevivir tiene que contar con una actividad innovadora constante y eficiente en la fabricación de sus productos, y en el control de sus operaciones, y que esto permita a las organizaciones ser cada vez más competitivas (Boix y Galleto, 2007; Jaffe *et al.*, 2005; Aggeri, 1999). Es por ello, que el control de las operaciones internas en las empresas debe permitir que los responsables de la actividad operativa sean capaces de mejorar a través de la actividad innovativa tener una mejor competitividad de la capacidad productiva de la organización, lo cual es importante mejorar el nivel de innovación en las áreas importantes de las organizaciones (Boix y Galleto, 2007). Esto significa que si una empresa necesita ser cada vez más competitiva, debe ser consciente de que la innovación le va a demandar además de responsabilidad, atención y dedicación, un sistema de operaciones adecuado a la fabricación y demanda de productos de calidad (Vrakking y Cozijnsen, 1993).

En este sentido, es importante mencionar que antes de cualquier implementación de innovacion, se debe tener pleno conocimiento del flujo de proceso para que las operaciones de un sistema de trabajo estén además de identificadas, estén controladas y para ello también es relevante contar con apoyo de documentos de control administrativo, con la finalidad de que faciliten la integración de las actividades de innovación, sin importar lo complejo que pueda ser su aplicación al sistema productivo (Vrakking y Cozijnsen, 1993). Por lo tanto, lo importante será que las operaciones estén listas para adoptar cualquier innovacion, siempre y cuando tenga una influencia positiva en las operaciones productivas (Jaffe *et al.*, 2002). Asimismo, es importante también considerar que la innovación de cualquier operación interna de los procesos tengan una estrecha relación con la calidad y con el control de los procesos productivos en sentidos administrativos y operativos (Jaffe *et al.*, 2002; Brunnermeier y Cohen, 2003).

Respecto a la responsabilidad que tiene la organización que han implementado innovación en las operaciones, a los cuales se les ha integrado por ejemplo cualquier tipo de innovacion tecnología, es importante mencionar que los directivos deben de respetar las políticas de trabajo y la funcionabilidad de los procesos, por lo cual, la innovación en las operaciones debe ser acorde a las necesidades que tenga la empresa por controlar los índices de productividad, de ofrecer productos personalizados y de contar siempre con un proceso confiable en lo operativo y en lo administrativo (Jaffe *et al.*, 2002; Brunnermeier y Cohen, 2003). Así mismo, las organizaciones que realizan actividades de innovación en las operaciones, principalmente en la PYME, muestran una ventaja competitiva sustancial con respecto a las actividades de innovación que se realiza en aquellas empresas de menor potencial económico, y esto se ve reflejado en los productos que se producen en este tipo de organizaciones, por lo que a su vez, esto se aprecia en los bajos niveles de competitividad que registran la PYME (Boix y Galleto, 2007).

Por otro lado, la competitividad de las empresas industriales dependen del servicio que ofrezca y del tipo de productos que elabore. La mejoría y desempeño de la organización por lo tanto, se verá reflejado en factores relacionadas con todos los aspectos (tecnológico, organizativo, estructural) de la actividad empresarial, (Doyle, 1994; Kaplan and Norton, 1992; Oaklan, 1993; Browne et. al., 1997; Cho et. al., 2008). En este sentido, las estrategias competitivas, son igualmente aplicables a empresas de alta tecnología que a las pequeñas o medianas empresas. Esto significa que el valor agregado, mano de obra intensiva y los productos de alto nivel permite a las empresas ser competitivas (Cho et. al., 2008). Las empresas entonces, en sus estrategias de mejora en la competitividad, dan una importancia a la especialización en áreas específicas que se benefician con algún implemento de innovacion (Rusten y Bryson 2007; Rusten et al. 2007).

Conforme al comportamiento y necesidades del mercado así como en el posicionamiento competitivo de las organizaciones (Sustar, 2004), se requiere de mayor compromiso, eficiencia y actitud por parte de los gestores, personal en general y áreas externas gubernamentales enfocadas en dar mayor crecimiento y competencia a las empresas dedicadas a la fabricación de partes y que requieren de contar con áreas de operación con buen nivel productivo y para lo cual, la flexibilidad de las operaciones es necesaria en las

empresas y así evitar poner en riesgo la competitividad de las empresas (Sustar, 2004; Nielsen, 1998; Tyson et al, 1994). Por lo tanto, la investigación realizada en el presente trabajo, presenta importantes resultados en los cuales refleja a través del tratamiento estadístico con apoyo del software EQS 6.1, los efectos positivos que tiene la actividad innovadora en la actividad operación en la Pyme de Aguascalientes para una mejor competitividad empresarial la cual ha trabajado con una muestra de 150 empresas del sector industrial a través de una encuesta personalizada con los gerentes de las organizaciones.

## **REVISIÓN DE LA LITERATURA**

Para las empresas en general, la innovación como concepto, está vinculada a la creación y mejora de nuevos productos (Vrakking & Cozijnsen, 1993), por ello, se considera que el crecimiento de las organizaciones está en su capacidad de innovar en cualquiera de sus áreas funcionales, sobre todo en las áreas operativas (Jiménez, 2006), por lo tanto, a esta actividad de innovacion se refiere específicamente a mejorar las estrategias relacionadas con el proceso productos que se generen en la organización. Asimismo, también innovar es contar con mejores sistemas operativos que estén estrechamente a su vez relacionados con la tecnología (Cilleruelo, 2005; Pavon y Hidalgo, 1997).

De acuerdo a Sherman Gee (1981), se considera que una operación, depende de una actividad operativa en la cual se plasma una idea, invención o reconocimiento a partir de una necesidad extraida de un estudio de mercado, y para lo cual se debe desarrollar un producto, técnica o servicio útil a los requerimientos de cliente (Pavon y Goodman, 1981). Asimismo, la Comisión Europea (1995), refiere que *"innovación es sinónimo de producir, asimilar y explotar con éxito una novedad, en las esferas económico y social, de forma que aporte soluciones inéditas a los problemas y permita así responder a las necesidades de las personas y de la sociedad"*. Respecto a la opinión de Machado (1997) refiere que *"la innovación es el acto frecuentemente repetido de aplicar cambios tecnológicos nuevos a la empresa, para lograr beneficios mayores, crecimientos, sostenibilidad y competitividad"*. Asimismo, la innovación es el resultado de un proceso de análisis y de estudios enfocados a mejorar alguna parte de las operaciones con fines productivos y de competencia (Velazquez, 2007; Fernandez, 1995).

En este sentido, toda innovación que se realiza en las operaciones parte de observar y tener registros de las actividades operativas, con la finalidad de que les permitan a las organizaciones, tomar decisiones de mejora e innovación en bien de tener un mejor control y eficiencia de sus operaciones (Fernandez, 1995). Desde luego que todo este trabajo de análisis, debe de tener como objetivo implementar acciones de mejora e innovación que impacten positivamente en las actividades operativas y administrativas de las empresas (Hirsch y Bijaoui, 1985; Teece, 1986). Por un lado, antes de adoptar algún tipo de innovación en las operaciones, se debe considerar el impacto que éste tendrá en el control ambiental interno de la Pyme, puesto que un proceso controlado productivamente, puede tener confiabilidad, (Jaffe y Palmer, 1997). Por lo tanto, además de la innovación en las operaciones, y como una forma de hacer más confiable el proceso, es importante también considerar la gestión de los residuos y los elementos auxiliares que se manejen dentro las operaciones productivas (Brunnemeier y Cohen, 2003). Por otro lado, es importante señalar que en la industria, específicamente en la Pyme, los registros que se obtienen por medio del control administrativo de las operaciones, permitirán a los directivos tomar mejores decisiones relacionadas con la mejora o innovación en las operaciones productivas (Khanna y Anton, 2002; Lee y Alm, 2004; De Motta, 2006).En este sentido, las organizaciones buscan siempre la oportunidad de innovar sus operaciones, por un lado compensar la inversión en tecnología y, por otro lado y con la importancia especial por lo que significa, reducir las cargas de trabajo, mejorar los procesos y sistemas de gestión y asegurar el abastecimiento de la materia prima, así como de los materiales auxiliares dentro del proceso a través de sistemas y métodos que hagan más efectivo y eficiente su manejo (Rennings y Zwick, 2002).

Actualmente, para los responsables de administrar las operaciones, innovar requiere no solo conocer los procesos de producción o la cadena de valor del producto, sino además tener un alto conocimiento en tecnología así como de innovaciones tecnológicas con la finalidad de poder darle mayor crecimiento y competitividad a la dinámica empresarial de la PYME industrial (Christensen y Rosenbloom, 1995; Christensen, 1997; Pavitt, 1998).

Es por ello, que es necesario resaltar que toda innovación en las operaciones, debe ser confiable; es decir, una operación productiva no puede ser impredecible ya que ello puede generar un ambiente de irregularidad y la calidad de los productos se pone en riesgo, pero más aun los programas de entrega de las mercancías a los clientes (Van de Kooy, 1983; Cozijnsen, 1989; Vrakking & Cozijnsen, 1993). En este sentido, toda actividad de innovacion al aplicarse en las organizaciones, debe de innovar el total de los procesos o áreas funcionales como una medida de estandarización (Vrakking y Cozijnsen, 1993; Kickert, 1979; Saren, 1984). Esto significa que, es importante que toda implementación tecnológica y de la correcta aplicación en las operaciones de una mejora o una actividad de innovación deba tener la finalidad de evitar problemas de abastecimiento de materias primas y de administración de las operaciones productivas (Bessant y Grunt, 1986).

Es importante mencionar que las empresas dedicadas a la fabricación de partes, constantemente actualizan sus métodos y estrategias para ofrecer mejores servicios tanto dentro de las operaciones como en la dinámica de entregas a cliente incluyendo el servicio post-venta, (Cho et. al., 2008). Estas estrategias de trabajo para las pequeñas empresas incluyen la introducción de innovacion, mejoras en la eficiencia de las operaciones, y en el aumento en la productividad (Cho et. al., 2008). Es por ello que las innovaciones tecnológicas en la industria son factores de competitividad, ya que afecta principalmente al costo de producción, la flexibilidad y administración de las operaciones (Sustar, 2004).

Finalmente, es importante resaltar que toda actividad de innovación que se integre en las operaciones en la Pyme, debe impactar en la mejora de los procesos y en el desarrollo de nuevos productos, teniendo en mente que la confiabilidad de las operaciones y en los productos permita que sean aceptados por los clientes. Esto quiere decir que para que el producto sea aceptado fácilmente en el mercado, todo el sistema productivo debe ser seguro, con innovacion y confiable (Ozcelik y Taymaz, 2004). En este sentido, la actividad de innovación en productos y procesos, deben ser una prioridad y un reto para los gerentes (Zhao y Li, 1997; Wakelin, 1998). En este sentido se puede plantear ahora la hipótesis referente a la relación entre la actividad innovadora y las operaciones en la PYME industrial:

H<sub>1</sub>: A mejor actividad innovadora, mejor nivel en las operaciones internas de la PYME.

Finalmente, en las operaciones internas de las empresas conduce a las organizaciones a obtener un mayor nivel de competitividad (Maldonado et al., 2012; Cho *et al.*, 2008; Gardiner et al., 2004), y para ello se plantea la siguiente hipótesis:

H<sub>2</sub>: Las operaciones internas impactan positivamente en la Competitividad de la Pyme.

## METODOLOGÍA

En la investigación, se analiza la actividad innovadora en la actividad de operación en la Pyme de Aguascalientes para una mejor competitividad empresarial. Para el desarrollo de este trabajo de investigación se tomó de referencia la base de datos que ofrece el Directorio Empresarial de Aguascalientes (SIEM, 2010) donde se menciona que en Aguascalientes, existen registradas 8661

empresas de las cuales 584 son PYME. El trabajo es de carácter empírico y se utilizo una muestra de 150 Pymes del sector Industrial en Aguascalientes a quienes se les aplico un instrumento de medición tipo encuesta personalizada para los gerentes o responsables directos de las operaciones de este tipo de organizaciones. Para la preparación del instrumento de medición, se utilizaron 3 bloques los cuales se describen a continuación: Bloque de Actividad Innovadora con 23 ítems con escala likert 1-5 los cuales refieren desde total desacuerdo hasta total acuerdo. El segundo bloque de Operaciones se tomo en cuenta tres factores básicos: la automatización de los procesos compuesto por 6 ítems; la confiabilidad de los procesos de producción compuesto por 8 ítems; el control administrativo compuesto por 8 ítems y 4 ítems de desarrollo de personal de operaciones, adaptada de Machorro et al.

(2007). Y por ultimo, para el tercer bloque, la medición de la escala de la competitividad se tomo en cuenta tres factores elementales: desempeño financiero compuesto por 6 ítems; la reducción de los costos de las compras compuesto por 6 ítems; y el uso de tecnología compuesto por 6 ítems, adaptada de Buckley *et al.* (1988) y Chang, et al., (2005). En este trabajo de investigación se realizó un Análisis Factorial Confirmatorio (AFC) con la finalidad de evaluar la fiabilidad y validez de las escalas de cada uno de los bloques. Así mismo, se utilizo un Modelo de Ecuaciones Estructurales (SEM), con el fin de comprobar si la estructura del Modelo esta correctamente diseñado, y para ello, se utilizo el método de máxima verosimilitud en el software EQS versión 6.1; para ello, la fiabilidad se ha evaluado considerando el coeficiente  $\alpha$  de Cronbach y del índice de fiabilidad compuesta (IFC) (Bagozzi and Yi, 1988).

En la Tabla 1 se observa que todos el valor del IFC superara el nivel recomendado de 0.7, lo cual facilita una evidencia de fiabilidad (Nunnally and Bernstein, 1994; Hair *et al.*, 1995) y permite presentar un modelo ajustado y para lo cual se han obtenido los siguientes datos: (*S*-*BX*<sup>2</sup> = 4870.0469; *df* = 1322; p = 0.0000; *NFI* = 0.895; *NNFI* = 0.918; *CFI* = 0.921; y *RMSEA* =0.079), todos los ítems de los factores relacionados son significativos (p < 0.05), el tamaño de todas las cargas factoriales son superiores a 0.6 (Bagozzi and Yi, 1988) y el índice de la varianza extraída (IVE) de cada par de constructos es superior a 0.5 recomendado por Fornell and Larcker (1981).

En la Tabla 2 se presentan los resultados obtenidos que describen la validez discriminante a través de dos test. Primero, con un intervalo del 95% de confiabilidad, ninguno de los elementos individuales de los factores contiene el valor 1.0 (Anderson and Gerbing, 1988). Segundo, la varianza extraída entre cada par de constructos del modelo es superior que su IVE correspondiente (Fornell and Larcker, 1981). Por lo tanto, se puede concluir que este trabajo de investigación muestra en base al análisis de sus resultados estadísticos suficiente evidencia de fiabilidad y validez convergente además de discriminante.

t robust	indicador	CF > 0.6 carga factorial	Carga factorial al cuadrado	media de la carga factorial	Error	Prom error	alpha cronbach > a 0.7	IFC > a 0.7 Indice de Fiabilidad Compuesta	IVE > a 0.5, Indice de Varianza
1.0000	AIC1	0.797	<u>cuadrado</u> 0.635	i	0.365	·	,— — — —	Compuesta	<u>extraida</u>
13.7560	AIC2	0.708	0.501	4	0.499			           	
13.7530		0.749	0.561	1	0.439	1			1
10.1520		0.692	0.479	- I	0.521	i i			1
13.0520	AIC5	0.756	0.572	1	0.428				
13.2960	AIB1	0.693	0.480	4	0.520	ł			
11.1610		•	0.486	1	ŀ	1			
		0.697		0.709	0.514	0.497	0.920	0.934	0.503
11.5930		0.687	0.472	1	0.528	ï	1		2
11.9840	AIB6	0.694	0.482	4	0.518	ł	1	I	
11.1640	AIB7	0.659	0.434	1	0.566	l		1	j
13.3260		0.678	0.460	1	0.540			1	1
11.5080	AIB14	0.716	0.513	1	0.487	1			1
10.5210	AIB15		0.486	•	0.514	ł			1
10.1520	AIB16	0.696	0.484	ļ	0.516	L	l	l	l 
	Σ	<u>9.919</u>	7.044		6.956				+
1.0000		0.729	0.531	1	0.469	1 1		1	1
13.9250	PA3	0.703	0.494	ł	0.506	ł		I	t i i i i i i i i i i i i i i i i i i i
8.6020	PA4	0.628	0.394	I	0.606	ı –	1	I	
11.6700	PA5	0.736	0.542	ļ	0.458	ļ	I	I	
11.7040	PA6	0.737	0.543	1	0.457	1		1	j
14.3670	PCC1	0.744	0.554	1	0.446	1		1	1
16.4500	PCC2	0.788	0.621	•	0.379	1		1	1
15.4820	PCC3	0.852	0.726		0.274	ì			!
15.1530		0.776	0.602	0.398	Í	İ	I		
13.1840	PCC8	0.698	0.487		F	r I	0.969	0.969	0.590
16.2560	PO1	0.857	0.734		0.266	ł			
15.6180	PO2	0.869	0.755	0.763	0.245	0.410			
15.1630		0.867	0.752		0.248				1
16.4270	PO4	0.884	0.732	1	0.248				
F	P04		0.781	•					
15.7850		0.878		1	0.229	1			í -
15.9200		0.884	0.781	1	0.219			1	1
11.2000		0.630	0.397	, 1	0.603	ı İ		1	1
14.7020	PO8	0.835	0.697	4	0.303	ł		I	
12.0210	PD1	0.692	0.479	1	0.521	1		I	
12.0550	PD2	0.699	0.489	1	0.511	1		1	j –
10.6710	PD3	0.654	0.428	1	0.572	1		1	1
10.4070	PD4	0.655	0.429		0.571		L	•	!
	Σ	16.795	12.988	L	9.012			L	
1.0000	FP1	0.721	0.520	I,	0.480	ļ	1	1	
24.5980		0.724	0.524	1	0.476	1		1	
25.9440	FP3	0.722	0.521	1	0.479	1		1	1
22.8050	FP4	0.794	0.630	I	0.370	i		I	1
16.4430	FP5	0.699	0.489	I	0.511	1	1	I	
14.1090	FP6	0.679	0.461	I	0.539	I	1	1	
14.0120	PC2	0.658	0.433	1	0.567	1		1	i
15.0580	PC3	0.676	0.457	1 1	0.543	•		1	1
15.1180		0.691	0.477	0.709	0.523	0.496	0.934	0.945	0.504
12.8710		0.693	0.480	1	0.520	Ì	1	1	
12.7530	PC6	0.699	0.489	1	0.511	r	1	I	
21.0690		0.797	0.635	ł	0.365	ł	!	1	í.
14.1840		0.695	0.483	1	0.517	1		1	1
15.3450		0.695	0.483	• 1	0.517	I		•	1
				- 1		i	Í	-	1
14.0660		0.690	0.476	ł	0.524	ł	1	I	
12.0530	TE5	0.696	0.484	1	0.516	1	1	I	í –
18.5020		0.729	0.531	' <u></u>	0.469	<u> </u>		¦	
	Σ	12.058	8.575		8.425			<u> </u>	l
S-BX2 (df	f = 1322) =	4870.0469:	p < 0.000	0; NFI = 0	.895; NM	VFI = 0.9	18; CFI = (	0.921; RMSE	A = 0.079
			ese valor en						
*** = p <									
P 1	2.001								

## Tabla 1: Consistencia interna y validez convergente del modelo teórico

	F1		F	2	F3		
F1	0.503		(0.2	81)2	(0.442)2		
	0.0		0.0	)79	0.195		
F2	0.281	0.043		590	(0.319)2		
F2	0.195	0.367	0.3	590	0.102		
   F3	0.442	0.047	0.319 0.044		0.504		
	0.348 0.536		0.231 0.407		0.504 I		

Tabla 2: Validez discriminante de la medición del modelo teórico

La diagonal representa el Indice de Varianza extraida (IVE), mientras que por encima de la diagonal se muestra la parte Ide la varianza (La correlación al cuadro). Por debajo de la diagonal, se presenta la estimación de la correlación de los Ifactores con un intervalo de confianza del 95%.

## RESULTADOS

Se realizó un SEM para comprobar la estructura del modelo conceptual y contrastar las hipótesis planteadas, utilizando los bloques contenidos en el instrumento de evaluación los cuales se describen de la siguiente manera: Primer bloque que constan de variables que miden la Actividad Innovadora, el segundo bloque con variables que miden las Operaciones y el último bloque, este está conformado por las variables relacionadas con la competitividad de la empresa. La validez nomológica del modelo fue analizada a través del desempeño del test de la Chi cuadrada, en el cual el modelo teórico fue comparado con la medición del modelo (Anderson and Gerbing, 1988; Hatcher, 1994).

Tabla 3: Resultados del SEM del Modelo Conceptual de Actividad Innovadora, Operaciones y Competitividad.

Hipotesis	Relacion Estructural	Coeficiente Estandarizado	Valor t Robusto	Medida de los FIT
H <sub>1</sub> : A mejor actividad innovadora, mejor nivel en las operaciones internas de <u>la PYME</u>	Actividad Innovadora —> Operaciones	0.418***	F — — — — I I 12.189 I F — — — —	S-BX2 = 4803.7376; df = 1304; p = 0.0000; NFI = 0.897;
H <sub>2</sub> : Las operaciones internas impactan positivamente en la Competitividad de la Pyme	Operaciones ————————————————————————————————————	0.458***	I I 12.947 I	NNFI = 0.918; CFI = 0.922; RMSEA =0.078

Las hipótesis planteadas en el presente trabajo de investigación muestran resultados favorables que permiten evidenciar resultados que a continuación se describen: Con respecto a la primera hipótesis  $H_1$ , los resultados obtenidos presentados en la Tabla 3 ( $\beta = 0.418$ , p < 0.000), indican que la la Actividad Innovadora tiene un impacto positivo en las Operaciones internas de las empresas Pyme. Y respecto a la segunda hipótesis  $H_2$  los resultados obtenidos ( $\beta = 0.458$ , p < 0.000), indican que la las Operaciones internas tienen un impacto positivo en la Competitividad de la Pyme.

#### **CONCLUSIONES**

Para la empresa PYME del sector industrial hoy en día, es importante considerar en sus estrategias de crecimiento, la mejora e innovacion a sus productos, a la comercialización de los mismos, a la adquisición de equipos y maquinaria que tenga una relación directa con la fabricación de los productos que la empresa ofrece al mercado y mejorar tanto los sistemas de abastecimiento como las actividades de gestión administrativa entre el personal involucrado con las operaciones y el crecimiento de la empresa.

Por otro lado, este tipo de empresas son consientes en varios sentidos de los riesgos que tiene la actividad de innovacion en términos de costos e inversiones, de la necesidad de al adoptar sistemas de innovacion, en automático se involucren actividades de capacitación, ya que esto acarrea problemas de administración y de financiamiento. Ante esta situación, las empresas temen a los problemas económicos del entorno, a la falta de información por parte del comportamiento del mercado, a la falta de información y asesoría respecto a la innovacion tecnológica y desde luego a la falta de capacitación en este sentido por parte del personal de la empresa y desde luego, a la desconfianza por parte de los servicios del outsoursing.

Respecto a las operaciones dentro de las empresas, la PYME muestra un especial interés por adoptar equipo automatizado que este controlado por software especializado que de confiabilidad a los procesos y a las necesidades de los clientes. Y al margen de que se tenga en la actualidad equipo mecánico ordinario, se ha tenido mucho interés por automatizarlo y por controlarlo por sistemas tecnológicos acordes a la capacidad de la empresa o a la naturaleza de los procesos productivos.

Con respecto a los sistemas administrativos, las operaciones de la empresa se ven fortalecidas por implementaciones de documentos que permiten un mejor control de registros y seguimientos tanto de la producción como de la productividad del sistema operativo. Esto también va a permitir que las empresas al tener controles administrativos, estén pensando en contar ya con un control de mantenimiento, un control de calidad por medio de sistemas estadísticos y control de la producción de manera mas detallada. Y desde luego, que las empresas poco a poco tienen la ventaja de tener personal capacitado para estas funciones. En términos de competitividad, las empresas muestran resultados favorables en términos de controles financieros y de control de gastos que luego generan que las empresas tengan serios problemas para mantenerse en operaciones en el ambiente en que se desarrollan. Y en este sentido, las empresas muestran un especial interés por controlar aspectos importantes como control de gastos en el suministro de la materia prima, en el manejo del transporte, en los insumos de materiales auxiliares y en el manejo de los costos de las operaciones productivas. Finalmente, es importante señalar que las empresas del sector industrial en este trabajo de investigación, muestran un espacial interés por desarrollar tecnología con la finalidad de mejorar sus productos y sus operaciones internas, y para ello, los gerentes son consientes de que necesitan un equipo y maquinaria que tenga la capacidad de adaptación y de flexibilidad ante cualquier reto que se presente en el mercado y con las necesidades de los clientes.

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# MEDICIÓN DEL CLIMA LABORAL EN UNA EMPRESA METAL MECÁNICA

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## RESUMEN

El objetivo de esta investigación es poder vislumbrar el clima organizacional. Particularmente en los aspectos de liderazgo y motivación en una empresa metal mecánica en el municipio de Frontera, Coahuila. este tipo de clima puede impactar en el grupo operario de la empresa. Para pasar de un clima autoritario paternalista a un clima más participativo. La mayor preocupación de los empresarios y gerentes dedicados al Marketing es encontrar las alternativas de motivación que lleven al éxito el clima laboral de los trabajadores. El problema principal es medir mediante un instrumento de clima laboral en qué medida influye el liderazgo y motivación con en la satisfacción laboral de los trabajadores. Así como la frecuencia. Media, moda, mediana, identificar las alternativas y niveles que determinan la Satisfacción y desempeño de los empleados de las empresas metal-mecánica. Podría plantearse en esta empresa en relación al aérea de producción un clima organizacional más participativo. Con respecto a las características de liderazgo y motivación que se les da a los empleados. En cuanto al área de producción es normal que no se labore en un ambiente de plena participación sin embargo se proponen cambios en la organización.

PALABRAS CLAVE: Clima laboral, Satisfacción, Motivación, Liderazgo.

## SUMMARY

The objective of this research is to glimpse the organizational climate. Particulary in the areas of leadership and motivation in metalworking company in the town of Frotera, Coahuila. This type of weather can impact the business operator group. To move from a paternalistic authoritarian climate to a more participatory environment. The major concerm of employers and managers marketing is dedicated to finding alternatives that lead to success motivational climate of workers. The main problem is measured by an instrument to measured by an instrument to measure work climate influences leadership and motivation on job satisfaction of employees. As well as frequency. Mean, mode, median and identify alternatives to determine the satisfaction levels and employee performance of metalworking companies. Could arise in this company relative to air production more participatory organizational climate. Regarding the characteristics of leadership and motivation given to employees in the area of production is normal labore not in an environment of full participation but proposed changes in the organization.

**KEYWORDS:** work climate, satisfaction, motivation, leadership.

## INTRODUCCIÓN

Hoy en día para las empresas en general les interesa saber si sus empleados se sienten dentro de un clima laboral satisfactorio, Abraham Lincoln nos menciona el líder paternalista, no se puede ayudar a los hombres haciendo permanentemente por ellos lo que ellos pueden hacer por si mismos. El trabajo en equipo motivación se encuentra el tipo de motivación que se desarrolla dentro del equipo : motivación externa (preferentemente económica), motivación intrínseca (preferentemente profesional), motivación trascendente (preferentemente personal) , estos tres géneros fueron concebidos por (Pérez López, Chinchilla Albiol, Rosanas Martí, & Navarro, 1998). (Llano, 2004) Finalmente, el mando requiere la

confianza en las personas sobre las que tengo autoridad. Es cierto, también en este punto que la confianza tributada a mis colaboradores depende en buena parte de la confianza en si mismo.

#### Planteamiento Del Problema

El problema principal es medir mediante un instrumento de clima laboral, si influye la relación de Jefe Inmediato (Líder) con en la satisfacción laboral de los trabajadores en una empresa Metal-Mecánica Identificar las alternativas de motivación en la relación laboral.

#### **Objetivo General**

Determinar el efecto que influye la relación de trabajo del jefe Inmediato con la satisfacción laboral de los trabajadores en la empresa metal mecánica. Determinar si existe correlación en el Jefe Inmediato con el clima laboral satisfactorio. Determinar si los trabajadores disfrutan el trato con su Jefe Inmediato.

#### Preguntas De Investigación

¿Existe correlación en el Jefe Inmediato con el clima laboral satisfactorio? ¿Efecto que influye la relación de trabajo del jefe con el clima laboral? ¿% de los trabajadores que disfrutan el trato con Jefe Inmediato de trabajo en la empresa?

#### Marco Contextual

Coahuila es el tercer estado más grande del país, se encuentra localizado en el noreste de México comparte frontera con estados unidos de Norteamérica de 512 kilómetros, su extensión territorial es de

151,571 km.<sup>2</sup> su población es de 2;748,391 según datos del Inegi 2010. de los cuales el 49.63% son Hombres y el 50.37% son mujeres con un PIB estatal de 36.3 % comercio, restaurantes y hoteles 20.4% y servicios 16.9%, Frontera cuenta con 75,215 habitantes.

## **REVISIÓN LITERARIA**

(Chiang Vega, Martín Rodrigo, & Núñez Partido, 2010)Consideran la variabilidad encontrada en los grupos ocupacionales en relación a las necesidades de logro, poder, afiliación y satisfacción para aplicar intervenciones y estimular la motivación laboral. (López, 2008) en su ponencia ambiente laboral y factores que afectan el desempeño propone alternativas de motivación como :

*Reconocimiento*: Estrategia: crear un programa de incentivos a los empleados dentro de la compañía, por parte de los directivos, aplicándolo de forma mensual, ubicando las edades y estado civil de sus trabajadores para adaptarlo según sus distintas necesidades.

*Disciplina:* Estrategia: establecer un manual de reglas y procedimientos aplicable a los empleados en general de manera constante, que regule y conserve la atmósfera laboral en armonía, dentro de las instalaciones.

*Comunicación:* Estrategia: establecer un flujo constante de comunicación tanto verbal como escrita, ya sea por circulares, ó correos enviados por Internet, entre niveles organizacionales, por parte de la alta gerencia descendiendo hasta el nivel inferior subordinado, para eliminar malos entendidos.

*Influencia del jefe inmediato:* Estrategia: supervisar la ejecución de las tareas de forma permanente, de parte de los jefes, para brindar apoyo, y si se requiere transferir la experiencia profesional resultando de esta forma un trabajo de calidad.

*Trabajo en equipo y relación con mi jefe:* Estrategia: organizar grupos de trabajo por proyecto, para compartir conocimientos y experiencia profesional, y una vez concluido el proyecto, reorganizar al personal involucrado en ellos para realizar nuevas tareas en la compañía.

*Cultura organizacional:* Estrategia: elaborar un programa continuo de adiestramiento a través de una detección de necesidades, en áreas como integración de equipos de trabajo y relaciones humanas, así como seguridad industrial, retroalimentando en forma mensual los resultados obtenidos de cada curso realizado. De igual forma, integrar a dicho programa algunos externos que permitan involucrar a la empresa en acciones de beneficio social.

(Herzberg, 2008) nos hace ver que también existen factores motivacionales como la participación, cooperación, la base técnica de motivación práctica que significa "el enriquecimiento del trabajo"(Greene, 2011) la comunicación es una especie de guerra, y su campo de batalla, la reacia y defensiva mente de la gente en la que quieres influir, la meta es penetrar sus defensas y ocupar sus mente, Induciendo a la gente a llegar a las conclusiones que tú deseas y pensar que llegó a ellas por si sola. (Maslow, 2002) Esta jerarquía impone que para satisfacer una necesidad de un nivel superior, primero se debe satisfacer una necesidad inferior previa, finalmente a medida que ascendemos en la pirámide, nuestras necesidades cambian de objetivos y pasan a ser necesidades de falta o privación a ser necesidades de crecimiento o autorrealización.

Fisiológicas: son los deseos básicos de alimentación del vestido y del techo.

*De seguridad:* son aquellas que brindan estabilidad, protección, ausencia de aficiones, amenazas y enfermedades.

*De asociación:* son aquellas necesidades de amor, amistad y la integración a una sociedad. Sociabilidad de los individuos.

*De estimación:* son aquellas necesidades de logro, de autoestima y estima de reconocimientos hacia los demás.

*De autorrealización:* Se refiere a todos los niveles interpersonales de logro y crecimiento, se puede decir que es querer lo que se tiene y sentirse orgulloso de los logros.

Necesidades de Crecimiento

Necesidades de relación

Necesidades de existencia

Teorías de Contenido Motivacional Maslow: Fisiológica, Seguridad, Sociales, Estima y Autorrealización.

Alderfer: Crecimiento, Relacionales y Existenciales Herzberg: Higiénicos y Motivacionales McClelland: Logro, Afiliación y Poder Teorías del Proceso Motivacional Vroom: Espectativas Festinger: Equidad



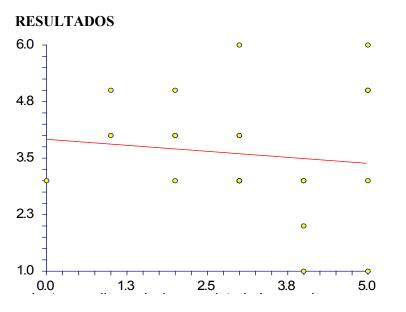
La Teoría ERG de Alderfer, C.(<u>Alderfer, 1969</u>) (Existenceneeds, Relatedneeds, Growthneeds) resalta las necesidades existenciales, relacionales y de crecimiento como elementos motivacionales básicos; la diferencia básica con los planteamientos de Maslow es que para Alfred Adler, Las necesidades satisfechas no guardan necesariamente una relación jerárquica y no llevan a la satisfacción de otro tipo de necesidades sino a un aumento o intensificación de dicha necesidad.

Por su parte Herzberg, plantea la existencia de Factores Higiénicos y Motivacionales; los primeros de orden preventivo y constituido por las características de contexto en el trabajo cuya presencia no aumenta la satisfacción pero si no están presentes causan insatisfacción.Estas son las condiciones físicas y ambientales que rodean al sujeto cuando trabaja. Estos planteamientos se corroboran por diversos estudios sobre motivación y con los vinculados a la satisfacción laboral.

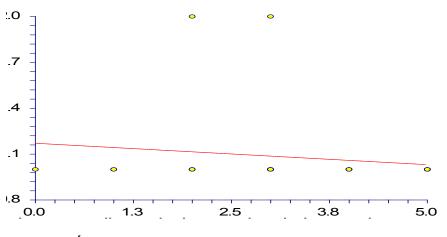
La teoría de la equidad o igualdad, planteada por (Festinger, 1979) señala que los empleados requieren percibir equidad o justicia en sus puestos de trabajo o empresa. Las personas tienden a comparar su actuación con las de otros y hacer juicios al respecto; la persona estará motivada en proporción con la justicia que percibe en las recompensas que recibe por una cantidad determinada de esfuerzo y en relación a la que otro recibe por lo que da. Un segundo grupo de teorías son las referidas al proceso motivacional cuyo énfasis se entra en los mecanismos por los que se logra la motivación. La teoría de las expectativas, representado por (Vroom & Manton, 2010) considera que la motivación opera en función con las expectativas que se tenga del resultado de su comportamiento y la valencia de las mismas.

# METODOLOGIA

Es de carácter mixto cualitativa ya que se acudió a la información documental y cuantitativa donde las técnicas utilizadas fueron entrevistas, además la investigación presenta la aplicación de 25 encuestas a los trabajadores, y se complementa con fuentes de carácter documental que han investigado sobre este tema



¿Existe correlación en mi jefe se interesa por los sentimientos de los subordinados con Me siento orgulloso de hacer el trabajo que hago?



# CONLUSIÓN

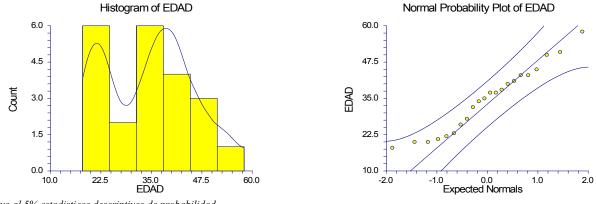
En los datos encontrados de acuerdo al instrumento validado, se observa claramente en los histogramas que un 85% de los empleados encuentra satisfecho con el trabajo que realiza sin embargo existe correlación con el jefe inmediato en cuanto a si se interesa poco de los sentimientos ya que un buen líder se interesa y al proyectar atención en el proyecta la relación entre los compañeros de trabajo creando un clima laboral satisfactorio. En cuanto a si el jefe inmediato es competente lo valoran con un 80% pero no existe correlación por lo tanto no influye en el clima laboral de la empresa metal-mecánica.

## PROPUESTA

Teniendo una excelente relación en los compañeros de trabajo y supervisores se recomienda a los directivos implementar recursos económicos motivacionales cuando exista una carga de trabajo extra.

<b>IDENTIFICAR A LOS</b>	DIAGNOSTICO	OBSERVACIÓN	PLAN ESTRATEGICO
INCORPORANTES			
Jefe Inmediato	Supervisar el trabajo laboral, establecer comunicación constante	Valorar esfuerzo, dedicacón y empeño	Reconocimientos por mes.
Jefe Inmediato	Trabajo en equipo, establecer disciplina.	Involucrarlos en el plan de trabajo	Ofrecer premio de convivencia al mejor equipo
Directivos	Escuchar propuestas, e ideas de los empleados	Valorar ideas, propuestas y desempeño de los trabajadores	Analizar las mejores propuestas.
Directivos	Crear incentivos al merito laboral.	Valorar, puntualidad, asitencia, desempeño colaboración de trabajo en equipo,	Premios viajes, Reconocimientos, semestrales. Eventos convivios laborales y familiares.

# ANEXOS



Significativo al 5% estadisticos descriptivos de probabilidad.

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# EFICIENCIA DE LOS PROGRAMAS ACADÉMICOS DE UNA INSTITUCIÓN UNIVERSITARIA EN COLOMBIA

Rolando Escorcia Caballero, Universidad del Magdalena Delimiro Alberto Visbal Cadavid, Universidad del Magdalena Andrés Munive Hernández, Universidad del Magdalena

# RESUMEN

La presente investigación de naturaleza cuantitativa es un estudio empírico cuyo propósito fundamental es determina la eficiencia relativa de los Programas Académicos de una Universidad Colombiana, a partir de la técnica análisis envolvente de datos, DEA, con el propósito de determinar los índices de eficiencia técnica y de escala de los programas académicos en la Universidad del Magdalena, permitiendo identificar ineficiencias en el uso de los recursos y la definición de recomendaciones que conllevaran a generar propuestas para ser más eficientes. La facilidad con que DEA maneja múltiples entradas y salidas hace de esta técnica la opción más atractiva para medir la eficiencia relativa de las Instituciones de Educación Superior.

**PALABRAS CLAVES:** Análisis Envolvente de Datos, Eficiencia, Unidad Tomadora de Decisiones (DMU), Educación Superior, Retornos a escala, BCC, CCR, Holguras.

# EFFICIENCY IN ACEMDIC PROGRAMS OF INSTITUCIÓN UNIVERSITARIA EN COLOMBIA

#### ABSTRACT

This research is an empirical study of quantitative nature whose fundamental purpose is determine the relative efficiency of the academic programs of a Colombian university, through the technique of Data Envelopment Analysis, DEA, in order to determine scores for technical efficiency and scale efficiency of academic programs at the University of Magdalena in Colombia, allowing to identify inefficiencies in the use of resources and make recommendations which will lead to generate proposals for improving efficiency. The facility with which DEA handles multiple inputs and outputs makes this technique the most attractive option for measuring the relative efficiency of the higher education institutions.

**JEL**: A20, C02, C67, I23

**KEYWORDS**: Data Envelopment Analysis, Efficiency, Decision Making Unit, Higher Education, Return to Scale, BCC, CCR, Slack

# LA GUELAGUETZA DE ACERVO BIBLIOGRÁFICO PARA MUNICIPIOS MARGINADOS EN EL ESTADO DE OAXACA

Ana Luz Ramos Soto, Universidad Autónoma "Benito Juárez" de Oaxaca

# RESUMEN

El proyecto tiene como objetivo general, dotar de acervos bibliográfico a municipios marginados del estado de Oaxaca, estos municipios son escogidos por que tienen un Índice de Desarrollo Humano bajo ya que uno de los indicadores que maneja este índice es la educación, estos municipios reportan el 55% de la población femenina analfabeta y el 2.5 promedio de escolaridad en el municipio, la metodología utilizada es a través de fechas determinadas durante el año, se realizan colectas de libros por los estudiantes de la Universidad Autónoma "Benito Juárez" de Oaxaca (UABJO), los cuales son de diferentes niveles: de prescolar, primaria, secundaria, bachillerato y de nivel superior, una vez que son recibidos se pasan al hospital del libro siendo este, la dirección de servicios editoriales de la UABJO, donde estudiantes de servicio social a través del personal de dicha dirección los libros son restaurados para posteriormente formar el acervo para ser entregado, como resultados se han entregado dos acervos bibliográficos de 700 libros, a los municipios de: Yogana y San Pedro y San Pablo Ayutla uno de ellos ubicado en la Región de los Valles Centrales y otro en la Región de la Sierra Norte del Estado de Oaxaca.

PALABRAS CLAVE: Marginación, Educación, Municipios

# THE BIBLIOGRAPHIC GUELAGUETZA FOR MARGINALIZED MUNICIPALITIES OF OAXACA

# ABSTRACT

The project's overall objective is to provide bibliographic collections marginalized municipalities of the state of Oaxaca, these municipalities are chosen because they have a low Human Development Index as an indicator that handles this index is education, these municipalities report the 55% of the female population illiterate and 2.5 average education in the municipality, the methodology used by certain dates during the year, collections of books are made by students of the Universidad Autonomy "Benito Juarez" of Oaxaca (UABJO), which are of different levels: preschool, primary, secondary, and higher secondary school, once they are passed to the hospital received the book and this, the direction of the UABJO editorial services, where social service students through personal address books that are subsequently restored to form the stock to be delivered, and results have been given two library collections of 700 books, the municipalities of: Yogana and San Pedro and San Pablo Ayutla one located in the Central Valleys region and another in the Sierra Norte region of Oaxaca.

**JEL:** I1, I10, I2, I24

KEYWORDS: Marginalization, education, municipalities

# INTRODUCCIÓN

La Universidad Benito Juárez de Oaxaca a través de la Agencia de Desarrollo Integral UABJO-SEDESOL, realiza trabajos con las comunidades marginadas del Estado de Oaxaca, con la finalidad de diseñar propuestas de política pública que contribuyan a elevar el IDH (Índice de Desarrollo Humano) de la población de los municipios con características de marginación y pobreza, por lo que el interés del cuerpo Académico de Investigadores de la Facultad de Contaduría y Administración denominado "Emprendedores", conformado por la Dra. Ana Luz Ramos Soto, Dra. Rosa María Velázquez Sánchez; colaboran de forma conjunta con la L.C.E. Reyna Tello Pérez, LCC. Alexis Enríquez Vásquez y la Lic. María Margarita Gervacio Luna, para diseñar un proyecto sustentable que genere como resultado Acervos bibliográficos para las comunidades con altos niveles de marginación. La idea nace en el marco del "1er Congreso Internacional, Investigación, desarrollo sustentable, y entorno cultural, del área económico administrativa 2012" que tuvo como sede las instalaciones de la Universidad Autónoma Benito Juárez, llevándose a cabo los días 2 y 3 de marzo del presente año.

Descripción del problema. Uno de los principales problemas de México es la pobreza en la que vive una gran parte de su población, los retos más grandes que se contemplan es el combate a la marginación, desigualdad y falta de oportunidades. Algunos pueblos de Oaxaca, además sufren de privaciones como alimentación suficiente, servicios de salud básicos, y bajos niveles en educación. Oaxaca posee recursos naturales y una cultura milenaria que lo posiciona como una entidad competitiva, a nivel nacional e internacional, sin embargo; no se observa un equilibrio entre las condiciones de vida de la mayoría de la población y su riqueza natural. En el Estado de Oaxaca existen municipios de muy alto grado de marginación, entre los que destacan: Coicoyán de las Flores (2.77) y Santa María Apazco (1.92) en la Región Mixteca; Yogana (1.76) en la Región de Valles Centrales; San Pedro y San Pablo Ayutla (1.94) en la Sierra Norte; El Ciruelo (.88) en Pinotepa de Don Luis en la Región Costa; y Santa Cruz Acatepec (1.92) en la Región Cañada. (CONAPO,2010)

El Estado de Oaxaca se ha caracterizado por encontrarse en el grupo de alto grado de marginación dentro del contexto nacional desde 1970 teniendo un atraso de cuatro décadas de desarrollo económico, que se ve reflejado en su índice de pobreza, uno de los indicadores que permite romper el círculo de la pobreza es el acceso a la educación, en estos municipios encontramos que el 55% de la población femenina es analfabeta, y los varones poseen un promedio en general de escolaridad 2.5%, lo que crea la necesidad de impulsar una propuesta sustentable.(Ramos-Soto,2007)

Es importante mencionar que en el estado de Oaxaca habitan diferentes etnias indígenas, por tal motivo esta entidad es dueña de un mosaico cultural muy singular; en la comunidad "El ciruelo" en Pinotepa Nacional, gran parte de su población desciende de la población negra traída durante la época de la Colonia desde África, es decir un grupo cultural ajeno a la cultura nativa de América, la realidad es que esta etnia es una de las más marginadas, "Hoy todavía se puede hablar de la ausencia de la cultura negra en el imaginario colectivo" (Jorge Alfonso Torres Romero e Isidro Ramírez López : 2008). "Es precisamente la invisibilidad de esta comunidad uno de los motivos de su marginación y vulnerabilidad social. Al no ser reconocidas como pueblo en la propia Constitución, son discriminadas y están fuera de los programas de apoyo comunitario gubernamental" (Céline Demol, Antropóloga, 2012). Por lo anterior, es necesario puntualizar en la necesidad de que esta comunidad cuente con acervo bibliográfico, el cual coadyuve a mejorar el nivel de educación de sus habitantes y el nivel de educación contribuya a evitar los actos de racismo ya sea por ignorancia o xenofobia. Con lo anterior se pretende impulsar programas en donde se haga conciencia a la población de este municipio que la lectura es un motor de equidad social y mostrar la importancia que esta tiene para el desarrollo humano.

Queda claro que dadas las condiciones de rezago en los indicadores de crecimiento económico en que vive la población de las comunidades que coinciden como la que sea tomado de referencia, existe la necesidad de dotar de material acervo bibliográfico para ser utilizado en pro de mejorar el grado de aprovechamiento y el aprendizaje, a futuro contribuir a que las nuevas generaciones de estudiantes continúen su formación educativa en grados superiores, y que estas generaciones sean el punto de partida para contrarrestar los indicadores de marginación en sus comunidades.

Justificación. De conformidad con lo que establece la Ley de Coordinación Fiscal Federal, en el marco del nuevo federalismo fiscal que se vive en México, los 570 Municipios que conforman el Estado de Oaxaca, reciben el Fondo de Aportaciones Federales para la Infraestructura Social Municipal, el cual se conoce normalmente como Ramo 33 Fondo III, el cual se debe destinar exclusivamente al financiamiento de obras, acciones sociales y a inversiones que beneficien directamente a sectores de su población que se encuentren en condiciones de rezago social y pobreza extrema en los siguientes rubros:

Ley de Coordinación Fiscal Federal.- "Art. 33... a) Fondo de Aportaciones para la Infraestructura Social Municipal: Infraestructura básica educativa...." (Ley de Coordinación Fiscal)

Teniendo como marco de referencia que existe el fundamento legal para que los Municipios inviertan los Recursos del Ramo 33 Fondo III en la creación de infraestructura básica educativa, se considera necesario desarrollar una campaña de capacitación dirigida a los Ayuntamientos de los 570 Municipios que conforman el Estado de Oaxaca, para que una parte de dichos recursos la destinen para:

- 1. Crear espacios físicos para la lectura en los niveles de: kínder, primaria, secundaria y preparatoria.
- 2. Dotar de bibliografía actualizada y suficiente a los espacios destinados a bibliotecas o salas de lectura.
- 3. Crear salas de medios audiovisuales y equiparlas, destinadas a la lectura para los diferentes niveles: primaria, secundaria, preparatoria, profesional.
- 4. Instrumentar mecanismos y estrategias para estimular la lectura entre los jóvenes.
- 5. Que esta propuesta se aplique no sólo a nivel Cabeceras Municipales sino también a nivel Agencias Municipales.

Por lo anteriormente expuesto, se considera viable la propuesta sustentable del equipo de trabajo "Red colecta Libros", toda vez que los 570 Municipios del Estado de Oaxaca, cuentan con recursos para apoyar esta medida que va en beneficio de sus habitantes, de todos los niveles educativos.

# METODOLOGÍA

Para la puesta en marcha de este modelo sustentable se ha avanzado en el diseño conceptual del mismo, por lo que al conseguir la victoria en la competencia, se estaría a la espera de fondos para dar inicio a la puesta en marcha del mismo. Se estima un máximo de seis meses para recibir, restaurar y entregar el acervo bibliográfico de acuerdo a fechas programadas

La evaluación del impacto que tendrá este proyecto sustentable en el Estado de Oaxaca, se presentará durante el "Segundo Congreso Internacional" organizado por la Facultad de Contaduría y Administración de la UABJO.

#### Actividades Planeadas:

1. Dar a conocer mediante una conferencia de prensa, el proyecto sustentable, "La Guelaguetza de acervo bibliográfico para municipios marginados del estado de Oaxaca, 2012". Con el propósito de informar y crear conciencia en toda la sociedad Oaxaqueña de la importancia que tiene unirse a este proyecto para dotar de acervo bibliográfico a las comunidades que viven con altos índices de marginación, creando vínculos entre los miembros de la red, para que conjuntamente se logre el objetivo de este.

- 2. Poner en marcha el plan de medios: 1ra Etapa: Carteles, Folletos, spots en las estaciones de radio, revistas locales (Gente OK, El jolgorio cultural, publicaciones universitarias), paradas de autobús y medios de transporte; insertar nuestra página web en portales y paginas de gobierno, uso de redes sociales, Facebook, Twuitter.
- 3. Organizar la primera "Mega colecta la carreta del libro", aprovechando la conmemoración de las fiestas patrias en el Estado. (Zócalo capitalino) 16 de septiembre. Invitar al voluntariado del programa "Seguimos Leyendo", para realizar una sesión de lectura en voz alta, para promover el espíritu de donación, y demostrar el abanico de posibilidades que surgen a través del hábito de la lectura, cuando se cuenta con acervo bibliográfico.
- 4. Crear el hospital del libro en las instalaciones de la UABJO, la Universidad Autónoma Benito Juárez de Oaxaca, destinará dentro de sus instalaciones un espacio físico, para acopiar, resguardar, y restaurar el material bibliográfico acopiado. A este espacio físico se le dará el nombre de "HOSPITAL DEL LIBRO". Se pretende que la restauración se lleve a cabo por personal especializado en biblioteconomía adscrito a esta institución, junto con los jóvenes que realizan su servicio social, para fomentar la solidaridad a los grupos más vulnerables.
- 5. Iniciar con la segunda etapa del plan de medios que consiste en poner en marcha el proyecto en jardines, explanadas, zócalo capitalino, y foros al aire libre; para reforzar el proyecto, mediante la participación de los líderes de opinión se motivan el interés y participación en la donación de libros; además de promueven los valores culturales de solidaridad y cooperación. Además se pretende invitar a la comunidad de ciudadanos estadounidenses radicados en la ciudad de Oaxaca, para que asistan a estos eventos y se integren en nuestro modelo sustentable, se solidaricen, cooperen y formen parte de esta primera Guelaguetza de acervo bibliográfico.
- 6. Realizar un inventario físico y clasificar el material bibliográfico, e ir formando lotes para la distribución del acervo bibliográfico.
- 7. Iniciar la tercera etapa del plan de medios, se pretende elaborar un video institucional del modelo sustentable, con los avances que ha tenido el proyecto hasta ese momento, para difundirlo al inicio de funciones de cine, y en la televisora local, e incluso en pantallas de tv dispuestas en puntos estratégicos de la ciudad. Con vistas de incrementar la participación de toda la población oaxaqueña en la última "MEGA COLECTA AYUDA A LOS REYES MAGOS".
- 8. Realizar la distribución de los lotes de libros que constituirán el Patrimonio Literario en las bibliotecas de las comunidades con bajo Índice de Desarrollo Humano. Esta entrega se planea llevar a cabo el día 6 de enero de 2013, ya que este día es muy importante dentro de la cultura de esas comunidades. El objetivo de entregarlos en esa fecha es recalcar que el patrimonio literario es un regalo de todos los hermanos oaxaqueños.

# RESULTADOS

De acuerdo a los estudios realizados por la Agencia de Desarrollo Integral UABJO-SEDESOL, y al análisis Fortalezas, Oportunidades, Debilidades y Amenazas (FODA) elaborados para cada uno de los municipios a los cuales se les pretende dotar de acervo bibliográfico.

En el área de debilidades se identificaron:

• Bajo nivel de aprovechamiento.

- Carencia de material Bibliográfico.
- No hay continuidad de los estudiantes en los grados superiores.
- Carencia de biblioteca.

Dentro del análisis FODA, se detallan las siguientes fortalezas:

- El interés de los padres por la educación de sus hijos.
- El interés de los niños por la educación.
- El interés por parte de los docentes para realizar su actividad.
- El incremento en la matricula escolar.

#### Tabla 1: Análisis FODA: Variable Educación

Fortalezas	Oportunidades
Incremento en la matrícula escolar. Capacitación del personal docente. Grado de estudios de los docentes. Interés por parte de los docentes para realizar su actividad. Apoyo con uniformes por parte del cabildo municipal. Interés de los padres por la educación de sus hijos. Interés de los niños por la educación.	El grueso de la población está en edad escolar. Actualización constante del personal docente. Infraestructura adecuada. Disponibilidad del cabildo municipal para implementar programa de alfabetización.
Debilidades Mala alimentación de los alumnos. Bajo nivel de aprovechamiento. Falta de mantenimiento a la infraestructura. Carencia de Acervo Bibliográfico. Carencia de mobiliario. Las aulas son multifuncionales. Carecen de áreas de recreo. Falta de servicios sanitarios. Becas insuficientes. No hay continuidad de los estudiantes en los grados superiores. La Telesecundaria carece de televisiones, de videos educativos y biblioteca. Existe la violencia intrafamiliar. Existe el abuso sexual. Maltrato físico a los alumnos por parte del personal docente La inequidad de género en los estudios. La falta de comunicación en el interior del municipio. Falta de seguimiento del proceso de alfabetización del sistema INEA.	Amenazas Falta de transporte para los alumnos inscritos en los planteles. Los problemas políticos afectan al proceso de enseñanza-aprendizaje. Inconformidad de los docentes por el ingreso percibido. Orografía del lugar. Dificil acceso a las poblaciones. El clima obstáculo a vencer, sobre todo para los niños y niñas que cursan el preescolar. Los derrumbes, ocasionados por el clima lluvioso, impiden el tránsito de los alumnos.

Fuente. Agencia Desarrollo Integral UABJO-SEDESOL

Del análisis FODA se detecta la necesidad específica de dotar de acervo bibliográfico a los municipios (unidad de análisis), existen diversas razones por las cuales los presupuestos municipales no le dan prioridad a la adquisición del acervo bibliográfico, puesto que las necesidades son muchas y el presupuesto no alcanza. Por otra parte los pobladores no cuentan con ingresos suficientes para adquirir libros, y obtener un mejor nivel educativo. La realidad es que los jefes /as de familia, apenas pueden cubrir alimentación de todos los integrantes, y la falta de oportunidades que caracteriza estas regiones hacen imposible que cuenten con acervo bibliográfico. Lo anterior se refleja en los índices de marginación que perduran a través del tiempo.La única forma de avanzar en el combate del rezago económico, es trabajando en iniciativas, de proyectos sustentables (que impulsen el hábito de la lectura), que creen redes donde se compartan los valores de solidaridad y cooperación, entre hermanos oaxaqueños y se promueva el apoyo entre los unos a los otros, compartiendo la misión de mejorar el entorno educativo de las futuras generaciones. La problemática expuesta puede erigirse como la oportunidad de brindar un proyecto sustentable alternativo de desarrollo en comunidades marginadas a gran escala.

#### CONCLUSIONES

Durante la exposición del presente proyecto sustentable, se ha señalado que México es un país que ha entrado a la modernidad económica bajo el signo de rezago educativo, particularmente en el Estado de

Oaxaca, existen 101 municipios con alto grado de marginación, y por esta razón se justifica la urgencia de superarlo. Por lo anteriormente mencionado es muy importante tener en cuenta que lo esencial es impulsar un desarrollo comunitario sustentable con la finalidad de que las comunidades puedan tomar el control de sus procesos y esto las ayude a tomar decisiones para salvaguardar sus propios valores culturales, todos los aspectos como son vivienda, salud, alimentación, etc., son indispensables para impulsar el desarrollo comunitario que por ende incrementaría la calidad de vida de estas comunidades; en este primer momento el proyecto solo se abocará en el aspecto de educación para proveer acervos bibliográficos, a seis comunidades con alto índice de marginación, la finalidad es integrar este proyecto con algunos programas educativos para despertar el interés de utilizar los libros, impulsar la lectura y fomentar la participación, para dar paso al detonante que altere la economía del saber, provea de esos pueblos. Si bien es cierto el modelo sustentable que proponemos plantea la siguiente pregunta ¿Y será suficiente solo llevar los libros a estas comunidades? La respuesta más honesta es que:

El libro no le dirá a nadie qué hacer. Sin embargo si partimos del precepto de que "Leer es el resultado de la voluntad de conocer"(Patte Genevieve, 2008); tenemos ganada una de las primeras batallas, puesto que en estas comunidades marginadas, existe el deseo de saciar esa sed de aprender; para reafirmar esta idea tomo algunas líneas de la investigación de la C.D. Antropóloga Céline Demol durante el encuentro "Los Pueblos Negros en movimiento por su reconocimiento" celebrado del 21 al 23 de octubre de 2011, que tuvo sede en la comunidad de Charco Redondo Juquila, en el municipio de Tututepec de Melchor Ocampo, Oaxaca; en donde durante largas jornadas se intentó encontrar mecanismos para dar visibilidad a las poblaciones afro mexicanas de Oaxaca, fortalecer los procesos organizativos y locales, así como regionales, con el propósito de seguir dando pasos hacia el desarrollo social y económico.

Entonces queda claro que estos pueblos están consientes de la necesidad de un proyecto sustentable, que se aloje en el seno de la comunidad, y que propicie la alfabetización, mejores niveles educacionales, y que sea un indicador de equidad social, ahora bien es necesario mencionar que se hace énfasis en el pueblo afro mexicano "El ciruelo", sin embargo esta actitud se comparte en las otras cinco comunidades que pretendemos beneficiar en un primer momento, y esto se argumenta basándonos en las áreas de oportunidad del análisis FODA presentado en el inicio del presente documento, es decir existe la voluntad de conocer. En teoría todos los ciudadanos deberíamos contar cerca de nuestros domicilios con una selección amplia y organizada de libros que pudiéramos consultar de manera gratuita, sin importar si es una comunidad urbana o rural, la realidad es que en las unidades de análisis no existe la biblioteca porque no hay acervo bibliográfico y si existe este no es suficiente. Sin embargo si existen actitudes favorables para desarrollo del hábito de la lectura, por que los padres de familia de esas unidades de análisis están interesados en contribuir en la mejora del entorno educativo de las generaciones en el presente y en el futuro. Existe un conocido refrán que dice "Sí alguien te pide un pescado, no se lo des enséñalo a pescar", nuestro propósito es enseñarlos a pescar, para que ellos puedan proveerse en el mundo del conocimiento, y sean los agentes de cambio en esas comunidades marginadas. Pues ellos son quienes conocen perfectamente sus recursos tanto naturales, como culturales, y son ellos quienes a largo plazo se incluirán en proyectos sustentables; llenos de una conciencia del lugar que ocupan en este mundo global.

A manera de síntesis el "Desarrollo sustentable es la capacidad de la gente para organizarse, crear instancias en procesos colectivos, solidarios y participativos, frente al mundo moderno que nos ofrece cosas positivas y negativas".(Toledo,2012), de ahí que surja el interés de este equipo de trabajo por dotar de acervo Bibliográfico a comunidades con altos índices de marginación para ofrecerles espacios de consulta, promoción a la lectura, expresión; los beneficiados con este proyecto van a ser personas más reflexivas, criticas y analíticas porque van a poseer una cultura de información que a su vez va a permitir impulsar el desarrollo sustentable de las comunidades. Como bien lo dice el premio nobel de literatura John Ernest Steinbeck., "*Por el grosor del polvo en los libros de una biblioteca pública, puede medirse la* 

*cultura de un pueblo",* entonces, hagámoslo posible, dotemos de acervo bibliográfico a esos municipios marginados.

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#### RECONOCIMIENTO

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# BIOGRAFÍA

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**PALABRAS CLAVES:** Cedt, Comentarios Al Mocde, Impuesto De Naturaleza Idéntica O Similar, Impuesto Empresarial A Tasa Única, México, Mocde, Usa.

# THE ESTABLISHMENT OF BUSINESS TAX -RATE AND ITS IMPACT CONVENTIONS IN TO AVOID DOUBLE TAXATION OF WHICH IS PART MEXICO

This research analyzes the impact of the Business Flat Tax (IETU), has had, from its entry into force, in 2008, the Conventions for the Avoidance of Double Taxation (CEDT) that Mexico had concluded before cited year and those that were modified and entered into force, after its implementation in the country. To do this we are addressing four major guidelines: A. - The CEDT concluded before the entry into force of the flat tax and that did not change with its entry into force of the flat tax and modified with its entry into force of the flat tax and modified with its entry into force of the flat tax and modified with its entry into force of the flat tax and modified with its entry into force of the flat tax and modified with its entry into force of the flat tax and modified with its entry into force of the flat tax and modified with its entry into force of the flat tax and modified with its entry into force of the flat tax and modified with its entry into force of the flat tax and modified with its entry into force of the flat tax and modified with its entry into force of the flat tax and formally recognize the text to IETU, C. - The CEDT concluded after the entry into force of the flat tax and formally incorporate it into your text and D.- The CEDT concluded after the entry into force of the flat tax and not formally incorporated into the text.

# PRESENTACIÓN

El objeto de estudio de la investigación es el IETU y su vinculación con los CEDT, en cuanto a su impacto legal y financiero. El campo de acción de nuestro trabajo, lo constituyen los CEDT que México ha celebrado después de la entrada en vigor del IETU en México, es decir, después del 1º de enero de 2008, así como los que se han modificado después de la fecha citada. Para ello estamos atendiendo a cuatro grandes directrices: A.- Los CEDT celebrados antes de la entrada en vigor del IETU y que no se modificaron con su entrada en vigor y permanecen sin reconocer formalmente en su texto al IETU; B.- Los CEDT celebrados antes de la entrada en vigor y reconocen formalmente en su texto al IETU; C.- Los CEDT celebrados después de la entrada en vigor del IETU y que lo incorporan formalmente en su texto y D.- Los CEDT celebrados después de la entrada en vigor del IETU y que no lo incorporan formalmente en su texto.

*Antecedentes para la creación del IETU en México:* Esta contribución entró en vigor el 1º de enero del 2008, según el Artículo Primero Transitorio de la Ley del IETU, publicada el 1º de octubre del 2007, DOF.Como justificante para su entrada en vigor se dijo por el Presidente de la República al enviar la iniciativa de creación de dicho tributo, lo siguiente:

"Para el diseño de la contribución empresarial a tasa única propuesta se consideraron los siguientes principios fundamentales: La simplificación de las contribuciones, que reduce los costos administrativos del sistema fiscal y promueve el cumplimiento de las obligaciones fiscales por parte de los contribuyentes. La flexibilidad del sistema impositivo, que le permite tener la capacidad de ajustarse rápida y adecuadamente a cambios en las condiciones económicas. La transparencia, pues se pretende que el sistema fiscal sea de

Como puede observarse, la finalidad directa de su implementación en México fue mejorar la recaudación impositiva, en virtud de que en el año 2007, representaba apenas el 9.5% en relación con el PIB, proyectando que el IETU incrementaría en 2009, un 1.8% del PIB. Según el documento de M. Victoria Espada, la proyección deseada se cumplió en virtud que sumando el 9.5% que se tenía, más el 1.8%, del IETU, representaría un 11.13% del PIB.

#### Los Elementos Esenciales Y Características Del IETU.

Para proceder a delimitar la problemática entre el IETU y los CEDT pasaremos a examinar algunos elementos esenciales del tributo.

*El sujeto pasivo de gravamen:* Lo constituyen las personas físicas y morales, así como los residentes en el extranjero con establecimiento permanente en el país. En cuanto a este último concepto, Luis Roberto Lara Ramos citando a McLees, John A, *et al*, reflexiona que cuando la ley del IETU se remite al concepto de Establecimiento Permanente de los tratados internacionales, *"podría ocasionar que resurgiera un riesgo de que una empresa norteamericana creara un EP en México, cuando mantuviera en este país un inventario para su procesamiento por una maquiladora, ya que de acuerdo con el tratado fiscal firmado entre México y EUA, dicha maquiladora constituye un agente dependiente y, por lo tanto, un EP con base en el artículo 5, párrafo 5(b)". Este riesgo fue considerado por el gobierno de México y con tal fin emitió el DECRETO por el que se otorgan diversos beneficios fiscales en materia de los impuestos sobre la renta y empresarial a tasa única, publicado en el DOF, el 5 de noviembre del 2007.* 

*El hecho imponible*: Conforme al artículo 1º, LIETU, lo constituyen los ingresos, por la enajenación de bienes, prestación de servicios independientes u otorgar el uso o goce temporal de bienes, que perciban personas físicas y morales residentes en territorio nacional o los residentes en el extranjero con establecimiento permanente en el país. Como puede advertirse, algunos de los ingresos que no se incluyeron en el hecho imponible del IETU, se refiere a los *ingresos provenientes de dividendos, intereses y premios derivados de loterías, rifas y sorteos.* 

El Incremento Patrimonial: A Diferencia Del ISR Mexicano Que Grava El Incremento Patrimonial, El IETU, Sólo Tiene Como Hecho Generador Determinados Ingresos, Por Lo Que No Cualquier "Incremento Patrimonial" Formaría Parte Del Tributo. Hacemos Notar Que El Pleno De La SCJN En México, Bajo El Esquema Que Diseñó El Legislador Mexicano Incorpora Dos Elementos Que No Se Encuentran Comprendidos En El Referido Ordenamiento Legal: Los "Ingresos Brutos" Como Hecho Imponible Del Gravamen Y El Establecimiento De "Beneficios Tributarios" Como Base Gravable. Estos Elementos Novedosos Se Derivan Del Precedente Número XL/2010, Titulado: EMPRESARIAL A TASA ÚNICA. LOS ARTÍCULOS 3, 5 Y 6 DE LA LEY DEL IMPUESTO RELATIVO, AL NO PERMITIR LA DEDUCCIÓN DE SUELDOS Y SALARIOS, PARTICIPACIÓN DE LOS TRABAJADORES EN LAS UTILIDADES DE LAS EMPRESAS, APORTACIONES DE SEGURIDAD SOCIAL, GASTOS DE PREVISIÓN SOCIAL, INTERESES DERIVADOS DE OPERACIONES DE FINANCIAMIENTO O MUTUO CUANDO NO SE CONSIDEREN PARTE DEL PRECIO Y REGALÍAS QUE SE PAGUEN ENTRE PARTES RELACIONADAS, NO VIOLAN EL PRINCIPIO DE PROPORCIONALIDAD TRIBUTARIA (LEGISLACIÓN VIGENTE A PARTIR DEL 1 DE ENERO DE 2008). [TA]; 9a. Época; Pleno; S.J.F. Y Su Gaceta; XXXII, Agosto De 2010; Pág. 241.

Bajo nuestra consideración, con la interpretación que realiza el Pleno de la SCJN y bajo la estructura que el legislador en México le dio al IETU, al considerarlo como un impuesto a los "ingresos brutos" y con una base gravable sobre los "beneficios tributarios", compromete seriamente la negociación entre México y USA, para que el segundo país mencionado, reconozca al IETU, formal y definitivamente, como un impuesto "de naturaleza idéntica o análoga" al ISR que contempla el CEDT. En el mismo tenor, Juan Carlos Roa Jacobo aduce: "es mi opinión que el legislador nacional creó un impuesto que, aun cuando tiene puntos de contacto importantes, no puede reducirse a una reiteración del impuesto sobre la renta, por más que los sujetos obligados lo estén en razón de ciertos ingresos, derivados de la realización de determinadas actividades, o por el hecho de que la base parezca describir un concepto equivalente a la utilidad". Sobre la misma línea argumentativa, si a decir de Lara Ramos, "las reglas norteamericanas (Reglas del Tesoro de EUA 1.901.2(b)(1)) establecen que un impuesto se considera como un impuesto sobre la renta solamente si se calcula con el objetivo de obtener una renta "neta", como en el caso del IETU, se basa en "ingresos brutos", en definitiva podría no considerarse como un impuesto idéntico o similar al ISR del CEDT con USA. No soslayamos que existen algunas opiniones de tratadistas en la materia que opinan que el IETU si puede considerarse un impuesto análogo al ISR, como es el caso de McLee, Reyes Freaner, González Bendiksen y Ocampo, así como José Manuel Miranda Santiago.

La Base Gravable: En términos del artículo 1, LIETU, se obtiene disminuyendo de los ingresos percibidos por las actividades gravadas por el IETU, las deducciones autorizadas. A dicha base se aplicará la tasa respectiva y se obtendrá el IETU a pagar. Este IETU a pagar podrá disminuir, una vez que apliquen los créditos que previenen los artículos 8 y 11, LIETU. En materia de deducciones, a diferencia de la mecánica del ISR que tiene regla general la deducción los gastos estrictamente indispensables para obtener el ingreso, el IETU no permite la deducción, entre otros conceptos de sueldos y salarios, participación de los trabajadores en las utilidades de las empresas, aportaciones de seguridad social, gastos de previsión social, intereses derivados de operaciones de financiamiento o mutuo cuando no se consideren parte del precio y regalías que se paguen entre partes relacionadas. (Véase la Jurisprudencia 164/2010, de la Segunda Sala de la SCJN en México, denominada: Empresarial A Tasa Única. Los Artículos 3, 5 Y 6 De La Ley Del Impuesto Relativo, Al No Permitir La Deducción De Diversos Conceptos, No Violan El Principio De Proporcionalidad Tributaria (Legislación Vigente A Partir Del 1 De Enero De 2008). [J]; 9a. Época; 2a. Sala; S.J.F. y su Gaceta; XXXII, Diciembre de 2010; Pág. 488).

#### La Posible Derogación Del Título II Y IV, Capítulos II Y III De La Ley Del ISR En México.

Según el Artículo Décimo Noveno de las disposiciones transitorias de la LIETU, que transcribimos enseguida, se preveía derogar de la LISR en México, el tratamiento fiscal de las personas morales y personas físicas actividades empresariales y servicios profesionales para regularlos en el IETU, lo que de entrada ameritaba avisar a los países firmantes de los CEDT con México de esta posibilidad. Destacamos que a través del documento denominado "El Impuesto Empresarial a Tasa Única (IETU): Un diagnóstico a tres años de su implementación", la SHCP opinó que no era recomendable la derogación de los regímenes físcales antes señalados. Algunas consideraciones para emitir esta opinión fueron las siguientes:

"En términos generales el IETU ha logrado recaudar más pero sin que necesariamente sean los mismos contribuyentes del ISR. El IETU ha logrado captar mayores ingresos y distribuir la carga de la recaudación entre más contribuyentes. Esto implica que de eliminarse el IETU, la distribución de pago de impuestos directos por nivel de ventas se concentraría aún más en aquellos contribuyentes que ya aportan la mayor parte de la recaudación de ISR. Es decir, la eliminación del IETU tendría como consecuencia incrementar la carga impositiva de las mismas empresas que ya contribuyen con la mayor parte de los impuestos directos. • • •.

Aunque el Congreso Federal Mexicano no emitió pronunciamiento expreso y formal sobre este estudio, tácitamente lo aceptó en el sentido de coexistir el ISR y el IETU, tomando en cuenta además que al mes de octubre de 2012, siguen vigentes los Títulos II y IV, capítulos II y III de la Ley del ISR mexicana.

El artículo 2, del Modelo de Convenio Tributario sobre la Renta y sobre el Patrimonio de la Organización para la Cooperación y el Desarrollo Económico (MOCDE).

Sobre este precepto tenemos las siguientes cuestiones a resaltar:

A.- El MOCDE, sólo incluye expresamente al ISR y el impuesto sobre el patrimonio y corresponderá a los estados contratantes en los CEDT, adicionar alguna otra contribución que consideren indispensables para las finalidades de dicho instrumento.

B.- Para los efectos del MOCDE, se considera ISR e impuesto sobre el patrimonio, el que grava la totalidad de la renta o cualquier parte de ésta, *incluidos los impuestos sobre las ganancias derivadas de la enajenación de la propiedad mobiliaria o inmobiliaria, los impuestos sobre los importes totales de los sueldos o salarios pagados por las empresas, así como los impuestos sobre las plusvalías latentes.* 

C.- El MOCDE prevé aplicar, a los tributos de naturaleza idéntica o similar, que se establezcan con posterioridad a la firma del CEDT.

# La Interpretación Del Artículo 2, MOCDE, Bajo Las Directrices De Sus Comentarios.

El Servicio de Administración Tributaria (SAT) en México, a través de la Regla 1.2.1.19., de la Segunda Resolución de Modificaciones a la Resolución Miscelánea Fiscal para 2012, publicada en el DOF, el 7 de junio 2012, fijó la naturaleza jurídica de los comentarios al MOCDE, de tal manera, que atendiendo a la referida porción normativa en materia de los CEDT: Los celebrados por México deben interpretarse conforme a los artículos 31, 32 y 33 de la Convención de Viena sobre el Derecho de los Tratados entre Estados y Organizaciones Internacionales (CVDT); La doctrina es coincidente en la necesidad de que "el tratado de los tratados", como lo es la CVDT debe aplicar para interpretar a los CEDT, por ejemplo, Francisco Alfredo García Prats y Eugenio Grageda Nuñez. De tal manera que acudiendo a los comentarios al artículo 2 relativo a los impuestos comprendidos en el convenio, tenemos las siguientes directrices:

1.- Se pretende "evitar la necesidad de firmar un nuevo convenio cada vez que se modifique la legislación interna de los Estados contratantes, así como garantizar que a cada Estado contratante se le notifiquen las modificaciones importantes de la legislación tributaria del otro Estado". (numeral 1 de los comentarios al artículo 2 del MOCDE)

2. Se prevé que "los Estados contratantes son libres de restringir el ámbito de aplicación del Convenio a los impuestos ordinarios, de extenderlo a los extraordinarios, o incluso de establecer disposiciones especiales". (numeral 5 de los comentarios al artículo 2 del MOCDE).

3.- Se establece que "Cada Estado se compromete a notificar al otro las modificaciones relevantes introducidas en su legislación tributaria, comunicándole, por ejemplo, información relativa a detalles de los impuestos nuevos y de otros que han sido sustituidos. Se anima a los Estados miembros a comunicar otras modificaciones importantes, tales como nuevas reglamentaciones o sentencias de los tribunales; muchos países ya observan esta práctica. Los Estados contratantes pueden extender sus exigencias de notificación hasta reflejar cualesquiera notificaciones importantes habidas en otras leyes con incidencia

*en sus obligaciones derivadas del convenio* . . ." (numeral 5 de los comentarios al artículo 2 del MOCDE).

Los CEDT celebrados por México y su panorama antes y después de la entrada en vigor del IETU. En efecto, antes y después de la entrada en vigor del IETU, podemos identificar cuatro escenarios posibles en los CEDT: *A.- Los CEDT celebrados antes de la entrada en vigor del IETU y que no se modificaron con su entrada en vigor y permanecen sin reconocer formalmente en su texto al IETU; B.- Los CEDT celebrados antes de la entrada en vigor del IETU y que no se modificaron con su entrada en vigor del IETU y que se modificaron con su entrada en vigor y reconocen formalmente en su texto al IETU; C.- Los CEDT celebrados después de la entrada en vigor del IETU y que lo incorporan formalmente en su texto y D.- Los CEDT celebrados después de la entrada en vigor del IETU y que no lo incorporan formalmente en su texto.* Bajo estas cuatro directrices examinamos algunos de los CEDT celebrados por México con otros países.

V.- el cedt que celebraron méxico y usa, como un instrumento jurídico celebrado antes de la entrada en vigor del ietu y cuyo texto no se modificó para reconocerlo expresamente. La importancia del análisis del referido instrumento internacional, en este trabajo obedece a que USA constituye en México, el 36.9% de la Inversión Extranjera Directa (IED), en el primer semestre del 2012. Además desde el año 2000 hasta el 2012, considerando una IED acumulada por país de origen, USA representa en México un 49.6%. Considerando las cifras anteriores, con la entrada en vigor del IETU en 2008, México decidió darle prioridad a la negociación con USA, con el fin de que el nuevo tributo se considerara como un impuesto "de naturaleza idéntica o análoga" al ISR pactado en el CEDT. Los resultados de la negociación los comentamos enseguida. Según el Comunicado de Prensa 115/2007, del 10 de diciembre de 2007, titulado el gobierno norteamericano reconoce la acreditación del impuesto empresarial a tasa única, la shcp informó sustancialmente: "que el gobierno norteamericano, a través del Departamento del Tesoro y el Servicio de Rentas Internas (IRS, por sus siglas en inglés) ha anunciado que los contribuyentes norteamericanos podrán acreditar, contra el impuesto sobre la renta a su cargo en EUA, el Impuesto Empresarial a Tasa Única (IETU) que paguen en México sin que las autoridades fiscales de EUA impugnen dicho acreditamiento. El acreditamiento no será objetado en tanto las autoridades fiscales de EUA realizan un estudio (descrito más adelante) del IETU.

Es importante destacar que un crédito aplicado durante el periodo del estudio no podrá ser impugando posteriormente por las autoridades fiscales americanas". México no quiso correr el riesgo de que no se aceptara el acreditamiento del IETU en USA, como fue "El caso del Impuesto Regional Italiano sobre Actividades Productivas (IRAP), que es similar al IETU, es un ejemplo de cómo una modificación estructural a un sistema tributario puede generar la pérdida de acreditamiento como impuesto pagado en el extranjero. Italia tenía un impuesto local sobre la renta (ILOR) que gravaba el trabajo y posteriormente fue sustituido por el IRAP que grava también los otros factores de la producción, este cambio tuvo como consecuencia que los Estados Unidos de América determinara que el impuesto sólo sería acreditable de forma parcial". Aunque como ya lo expresamos en esta investigación en los puntos 2.2.1 y 2.3.1., el criterio del Pleno de la SCJN en México y la estructura que el legislador mexicano le dio al IETU, lo aleja de ser considerado como un impuesto idéntico o análogo al ISR que contiene el CEDT celebrado con USA. A la fecha de la terminación del presente trabajo, USA no ha emitido un documento escrito en el que reconozca en forma definitiva que el IETU puede considerarse como un impuesto "de naturaleza idéntica o análoga" al ISR y por ello, la referida contribución no constituve parte del CEDT celebrado con México. Tampoco USA decidió modificar el CEDT celebrado con México para incorporar el IETU a su texto formal, lo que desde luego no es un requisito de validez, ya que bastaría que USA manifestara por escrito su conformidad, para que tuviera plena validez, de acuerdo con el artículo 2, del CEDT.

CEDT celebrados por México antes de la entrada en vigor del IETU y que después de su vigencia, fue reconocido como un impuesto comprendido en los CEDT. Ello lo informó la SHCP, en el boletín denominado "DOBLE TRIBUTACIÓN", en el que se específica que "Los países con los que México

tiene un Tratado para Evitar la Doble Tributación en vigor han aceptado al Impuesto Empresarial a Tasa Única (IETU) como un impuesto comprendido en dichos instrumentos. Estos países se enlistan a continuación":

> Polonia Portugal

Reino Unido Rep. Checa

Rep. Eslovaca

Rumania

Rusia Singapur

Suecia

Suiza

1.	Alemania	13.	Finlandia	
2.	Australia	14.	Francia	25.
3.	Austria	15.	Grecia	26.
4.	Bélgica	16.	Indonesia	27.
5.	Brasil	17.	Irlanda	28.
6.	Canadá	18.	Israel	29.
7.	Chile	19.	Italia	30.
8.	China	20.	Japón	31.
9.	Corea	21.	Luxemburgo	32.
10.	Dinamarca	22.	Noruega	33.
11.	Ecuador	23.	Nueva Zelanda	34.
12.	España	24.	Países Bajos	

cedt celebrados por méxico antes de la entrada en vigor del ietu y que se modificaron después de ello, pero que no lo incorporaron formalmente a su texto, en virtud de que la reforma al protocolo de los cedt, obedeció a fines diversos. Los países que optaron y decidieron lo anterior, los analizamos enseguida. cedt celebrados con austria, el gran ducado de luxemburgo y singapur, antes de la entrada en vigor del ietu y que se modificaron con posterioridad a su vigencia, pero que no lo incorporaron formalmente a su texto, ya que la finalidad de la reforma fue para el fortalecimiento de intercambio de información que se regula en el artículo 26, cedt. cedt celebrados por méxico antes de la entrada en vigor del ietu y que se modificaron después de ello, para incorporarlo formalmente a su texto.

Estos son los casos de los países bajos y de la gran bretaña e irlanda del norte, que al modificar su protocolo, reforman el artículo 2, de los cedt, para reconocer como impuestos mexicanos o de méxico; el impuesto sobre la renta (isr) y el impuesto empresarial a tasa única (ietu). Los textos están representados por: el protocolo que modifica el convenio entre los estados unidos mexicanos y el reino de los países bajos para evitar la doble imposición e impedir la evasión fiscal en materia de impuestos sobre la renta, con protocolo, firmado en la haya el 27 de septiembre de 1993, publicado el 29 de diciembre del 2009, dof y el protocolo entre el gobierno de los estados unidos mexicanos y el gobierno del reino unido de la gran bretaña e irlanda del norte que modifica el convenio para evitar la doble imposición e impedir la evasión fiscal en materia doble imposición e impedir la evasión fiscal en contenio de los estados unidos mexicanos y el gobierno del reino unido de la gran bretaña e irlanda del norte que modifica el convenio para evitar la doble imposición e impedir la evasión fiscal en materia de impuestos sobre la renta y ganancias de capital, firmado en la ciudad de méxico el 2 de junio de 1994, publicado el 15 de abril de 2011, dof.

cedt celebrados por méxico con posterioridad a la entrada en vigor del ietu y que incorporan dicho tributo formalmente al convenio. cedt con la república federal de alemania, bahréim, barbados, república de hungría, república de islandia, república de panamá, federación de rusia, república de sudáfrica, consejo federal suizo y república oriental del uruguay, celebrados por méxico con posterioridad a la entrada en vigor del ietu y que lo incorpora formalmente al convenio. En todos los cedt antes mencionados, en su artículo 2, se reconocen como impuestos mexicanos o de méxico; el impuesto sobre la renta (isr) y el impuesto empresarial a tasa única (ietu). Enseguida, en el esquema siguiente, presentamos los países y la fecha de publicación en el dof.

Países firmantes	Publicación en el DOF	Considera o no el IETU
		como parte del CEDT
República Federal de Alemania	15 de diciembre 2009	SI
Bahréin	27 de abril de 2012	SI
Barbados	15 de enero de 2009	SI
República de Hungría	26 de diciembre de 2011	SI
República de Islandia	31 de diciembre de 2008	SI
República de Panamá	30 de diciembre de 2010	SI
Federación de Rusia	20 de mayo de 2008	SI
República de Sudáfrica	21 de julio de 2010	SI
Consejo Federal Suizo	22 de diciembre de 2010	SI
República Oriental del Uruguay	28 de diciembre de 2010	SI

cedt celebrado por méxico después de la entrada en vigor del ietu y que no lo incorporó formalmente a su texto. Este sería el caso del acuerdo entre el gobierno de los estados unidos mexicanos y el gobierno de la república de la india para evitar la doble imposición y prevenir la evasión fiscal en materia de impuestos sobre la renta, publicado el 31 de marzo de 2010, dof.

# CONCLUSIONES

*Primera:* Que la finalidad directa de la implementación del IETU en México, fue mejorar la recaudación impositiva, en virtud de que en el año 2007, representaba apenas el 9.5% en relación con el PIB, proyectando que dicha contribución incrementaría en 2009, un 1.8% del PIB.

*Segunda:* Que el Pleno de la SCJN en México interpretando el ordenamiento que el legislador mexicano creó, incorpora dos elementos novedosos en la Ley del IETU, como son: los "ingresos brutos" como hecho imponible del gravamen y el establecimiento de "beneficios tributarios" como base gravable y que comprometen seriamente la negociación entre México y USA, para que el segundo país mencionado, reconozca al IETU, formal y definitivamente, como un impuesto "de naturaleza idéntica o análoga" al amparo del CEDT firmado entre ambas naciones.

*Tercera:* Que bajo el concepto de ingresos brutos del IETU, puede entrar en conflicto con el concepto de Renta Neta que maneja las Reglas del Tesoro de EUA 1.901.2(b)(1) y por ende, no autorizarse el acreditamiento del IETU en el referido país.

*Cuarta:* Que al tenor del artículo 2 de los comentarios al MOCDE, México procedió a dar aviso a los países con los que tenía un CEDT, para que se reconociera el IETU como un impuesto idéntico o similar al ISR contenido en dichos instrumentos internacionales y algunos países lo reconocieron sin modificar el texto de los CEDT y otros optaron por la vía formal, al modificar dichos convenios para incorporar al IETU como un impuesto mexicano amparado en los CEDT.

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# RESUMEN

Si bien, en cualquier tipo de empresa surge la necesidad de recurrir a una fuente de financiamiento externa para cubrir sus obligaciones empresariales, existe un fuerte impedimento por el que los empresarios no lo hacen: el desconocimiento de las posibles opciones existentes, pero principalmente el riesgo que le puede significar adquirir una deuda, aunado a la incertidumbre del buen uso que debiera darse a los recursos solicitados. En este trabajo se presenta la experiencia desarrollada para una microempresa, en donde a partir del diagnóstico, se detectaron las necesidades financieras con las cuales es factible alcanzar las estrategias de desarrollo planteadas a corto y mediano plazo para la empresa. Se identificaron, analizaron y seleccionaron las fuentes de financiamiento más adecuadas a dicho fin; detectando más de 70 programas de financiamiento entre los que se eligieron aquellos que cubrieran los requerimientos mínimos de acuerdo a las características particulares de la empresa en cuestión. Concluido lo anterior, se calculó el costo de financiamiento a los diferentes plazos ofrecidos por cada una de las fuentes seleccionadas y así, el empresario tuvo un punto de referencia que lo llevó a tomar la decisión y con ello, proceder a preparar la documentación necesaria.

PALABRAS CLAVE: fuentes de financiamiento, costo financiero, crédito financiero

# ELECTION OF FUNDING SOURCES FOR A BUSINESS: AN EXPERIENCE

#### ABSTRACT

While in any type of business there is the need to appeal to external financing sources to meet their business obligations, there is a strong impediment for entrepreneurs who do not: ignorance regarding the possible existing solutions, but mainly the risk may mean acquiring a debt, coupled with the uncertainty of well used of the requested resources, This paper presents the experience developed for a small business, where from the diagnosis stage, where detected with financial needs which is feasible to achieve the development strategies raised within the short and medium term for the company. The most appropriate financing sources were identified, analyzed and selected for this purpose; detecting over more than 70 financing programs among them were chosen the ones that cover the minimum requirements according with the specific characteristics of the company in question. Concluded above, it was calculated the financing cost of the different terms offered by each one of the sources selected and thus, the entrepreneur had a benchmark that lead him to take a decision and with it, proceed to prepare the needed documentation.

**JEL:** G11, G21, G23, G24, M10, M21

**KEYWORDS:** financing sources, financial cost, financial credit **INTRODUCCIÓN**  Multiservicios industriales es una empresa dedicada a la elaboración y distribución de especialidades químicas para la industria alimentaria, embotelladora y pecuaria. Empresa que se encuentra en la etapa de desarrollo empresarial donde uno de los grandes desafíos es el crecimiento de su mercado, por lo que se ve en la necesidad de incrementar su capacidad productiva para satisfacer las demandas de sus clientes y atender nuevos nichos de mercado por lo que debe adquirir más activos que le faciliten la eficiencia de sus operaciones y distribución de sus productos, tal situación le obliga a buscar fuentes de financiamiento que le permitan invertir en su crecimiento. Aquí se presenta la metodología seguida para que la empresa pudiera cuantificar los requerimientos de capital y conocer las características de las diferentes fuentes de financiamiento, hasta determinar, con base en los resultados de cada etapa, la más adecuada de acuerdo a las necesidades de la empresa, para finalmente establecer las conclusiones.

# **REVISIÓN LITERARIA**

De acuerdo a FUNDES (2006) el 43% de las PYMES fracasa por errores administrativos y 24% por errores financieros antes de cumplir un año al surgir dificultades en la presentación de la información financiera aunado a la informalidad, la demora en el pago de impuestos que le trae mayores gastos. Otras limitantes externas al crecimiento de las PYMES son los trámites gubernamentales, las políticas fiscales, la falta de conocimiento de los programas federales, el limitado acceso al financiamiento siendo este uno de los más grandes obstáculos y a la ineficacia de los programas gubernamentales. En lo referente a trámites gubernamentales y fiscalidad son procedimientos largos, burocráticos y variables que promueven la informalidad y como Pavón (2010) afirma las PYMES son vulnerables a un trato inadecuado y muchas veces corrupto desde los trámites para abrir una empresa y mantenerla dentro del orden legal.

Respecto al financiamiento, García (2007) y Campos (2006) coinciden en que el Sistema Financiero Mexicano es el conjunto de instituciones públicas y privadas a través de las cuales se llevan a cabo y se regulan actividades como: el otorgamiento y obtención de financiamientos, realización de inversiones con o sin riesgo, prestación de diferentes servicios bancarios que van de lo doméstico, hasta los que por disposiciones legales deban hacerse y que a su vez se puedan realizar en estas instituciones, emisión y colocación de instrumentos bursátiles y todas aquellas relacionadas a la actividad financiera como seguros, fianzas, arrendamientos financieros, compra y venta de divisas y metales preciosos, factoraje financiero entre otros. García (2007) describe los componentes más representativos del

SFM, agrupándolos en cuatro vertientes, aquellos relacionados a operaciones bancarias, a operaciones bursátiles, a las organizaciones que supervisan y regulan la actividad financiera en México y otras figuras financieras, cuyo propósito es la captación de recursos monetarios provenientes de inversionistas y ahorradores ya sean personas físicas y morales para después canalizarlos al financiamiento de aquellos que lo demandes. Por su parte, Haime (2004) y Hernández (2002) definen al financiamiento como la obtención de recursos financieros para que la empresa pueda llevar a cabo sus operaciones diarias, realización de nuevos proyecto, incremento de actividades o crecimiento a largo plazo que implique una inversión y Perdomo (2002) agrega que el "financiamiento es la obtención de recursos que requiere cualquier empresa para el desarrollo de sus operaciones cotidianas de manera eficiente". Donde independientemente del destino de los recursos y los medios por los cuales se obtienen los recursos financieros para su operación y crecimiento, en lo interno o externo, a corto, mediano y largo plazo, se le conoce de acuerdo a Hernández (2002) como "fuentes de financiamiento".

Al referirse a las fuentes de financiamiento de la empresa se incluye todas las instituciones, personas y empresas a las que se puede recurrir para obtener dichos recursos y dependiendo del tipo de empresa, giro y tamaño de la misma será la diversidad de las fuentes de financiamiento disponibles (Haime, 2004). Existen diversas fuentes a las que pueden recurrir las empresas, la clasificación habitual que se hace de ellas es de acuerdo con el origen de los recursos, las cuales se clasifican en internas y externas

(Hernández, 2002) también conocidas según Soriano & Pinto (2006) como fuentes de financiación propia o financiación ajena.

# METODOLOGÍA

La metodología empleada en este trabajo está conformada de 6 etapas; el diagnóstico se basó en el análisis propuesto por Kaplan y Norton (2000) desde cuatro perspectivas que engloban a la organización: la de finanzas, clientes, proceso interno y aprendizaje y crecimiento. A partir de los resultados del diagnóstico, las necesidades percibidas por la empresa y los objetivos del negocio se establecieron y diseñaron las estrategias de desarrollo las cuales se llevaron a cabo siguiendo las acciones determinas para el logro de las mismas. La siguiente etapa tuvo por objetivo conocer las necesidades financieras de la empresa para determinar el monto y tipo de crédito requerido. La identificación y análisis de las fuentes de financiamiento tuvo por objetivo detectar todas aquellos productos financieros factibles para la empresa en cuestión; dicha etapa se centró en la investigación documental, contrastando las alternativas financieras que brindan las diversas Instituciones del Sistema Financiero Mexicano. Por último, con base en el análisis y evaluación de las fuentes factibles de financiamiento, se determinó la más adecuada para la empresa en particular, proponiendo las estrategias para que el empresario tenga una base para decidir el curso a seguir y, en base a su decisión, recabar y organizar aquella documentación marcada como necesaria en la fuente de financiamiento elegida, con la finalidad de que la empresa tenga la oportunidad de ser candidato al financiamiento.

Figura 1: Etapas del proceso metodológico



En esta figura, se presentan las seis etapas seguidas para este trabajo, desde financiamiento do de acuerdo al enfoque propuesto por Kaplan y Norton que engloban a la organización: la de finanzas, clientes, de de acuerdo al enfoque propuesto por endizaje y crecimiento, para conocer la situación actual de la empresa a partir de la cual se diseñaron y desarrollaron las estrategias que pueden llevar a la empresa a alcanzar sus objetivos, para lo cual son necesarios recursos y dependiendo del monto, plantear recurrir a una fuente de financiamiento que debe ser seleccionada con las mejores condiciones para la empresa

#### **RESULTADOS**

Tabla 1: Diagnóstico de la empresa

Perspectiva	Resultados
Financiera	1. Sus ventas no han tenido un incremento considerable en el último año.
	2. Su margen de utilidad le permita hacer frente a sus gastos.
Clientes	1. Tiene identificado su nicho de mercado.
	2. Solo hace negocios con empresas con capacidad de pago en un tiempo no mayor a 30 días.
Proceso interno	1. Carece de tecnología adecuada, la utilizada se encuentra casi en el término de su vida útil.
	2. Maguinaria ensamblada por la empresa de manera artesanal.
	3. No se cuenta con equipo y material de laboratorio adecuado
Aprendizaje	y 1. Carece de planes de capacitación y actualización.
crecimiento	2. No cuenta con un manual de organización.
	3. Los colaboradores desconocen de manera completa sus funciones.

La tabla 1 es ejemplo de algunos de los elementos detectados en cada una de las perspectivas: en la financiera se establecieron dos, en la de clientes 10. En la perspectiva del proceso interno fue donde se plantearon más elementos, en total veinte, ya que se hace referencia a más de 35 productos, se analizaron procesos, clientes y competencia. Por último para el aprendizaje y crecimiento se establecieron 8 planteamientos. Es de mencionar que se establecieron en sentido positivo como: existen nichos de mercados al que puede incursionar, pero también negativo como: maquinaria ensamblada por la empresa de manera artesanal.

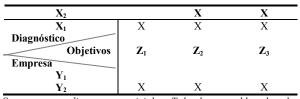
El resultado del diagnóstico se concentró en una tabla similar a la 1, de acuerdo a las cuatro perspectivas planteadas que fueron detectadas y analizadas a través de documentos históricos de la empresa, preguntas y observación directa en el área de trabajo

Con base en el diagnóstico, la empresa ha definido los objetivos actuales del negocio:

- 1. Incrementar su capacidad productiva para poder satisfacer las demandas de sus clientes y atender nuevos nichos de mercado.
- 2. Adquirir activos que faciliten la eficiencia de sus operaciones y distribución de sus productos.
- 3. Buscar fuentes de financiamiento que le permitan invertir en su crecimiento.

En atención al impacto de las necesidades en los objetivos del negocio y a los resultados de las relaciones anteriores, se establecieron dos tipos de estrategias: una estrategia externa que permita a la empresa identificar, analizar y seleccionar la fuente de financiamiento más adecuada, y una estrategia interna, que le permita a la empresa establecer registros de análisis de calidad de su materia prima, producto terminado y producto en proceso, elemento que tiene mayor relación con los demás que impactan directamente al cliente. Para lo anterior, se diseñó la matriz T de la figura 2, que presenta la relación de elementos.

Figura 2: Matriz de relación



Se presenta un diagrama matricial en T donde se establece la relación entre tres tipos de factores: (X) que son los elementos detectados en el diagnóstico con mayor relación entre sí: carece de tecnología adecuada, la utilizada se encuentra al término de su vida útil (equipo de pesaje, reactores y agitadores), carencia de equipo y material de laboratorio adecuado, falta de registros de M.P. y P.T y no se tiene un manual de organización; los elementos (Y) basados en Oportunidades, Debilidades y Amenazas, elegidos por ser los de mayor ponderación: impuestos, falta equipo de transporte, equipo de laboratorio insuficiente, necesidad de capacidad productiva, faltan reactores y adquisición de materias primas a menor costo y los Objetivos de la organización (Z).

Para determinar el tipo de financiamiento se definieron y cotizaron los activos a adquirir y así conocer el monto necesario, con ello y el destino de los recursos, se pudo determinar el tipo de financiamiento que deberá ser dirigido específicamente a incrementar y apoyar las actividades productivas de la empresa. Un primer paso para la selección de la o las fuentes de financiamiento fue analizar 10 instituciones crediticias y 75 programas a partir de lo cual se eliminaron todas las alternativas que no reunieron las condiciones mínimas requeridas para el caso en particular, como puede ser el monto mínimo requerido y el destino del crédito. En la tabla 2, se presenta la selección de los productos aplicables a las necesidades de la empresa extraída de una amplia gama de productos crediticios ofrecidos por el Sistema Financiero Mexicano.

Identificadas las fuentes de financiamiento que cumplen las condiciones mínimas requeridas, se analizó cada una de ellas, tomando en consideración: costo de financiamiento, monto máximo y mínimo que otorgan, tipo de crédito que manejan y sus condiciones, documentos que solicitan, políticas de renovación de los créditos (flexibilidad de reestructuración), flexibilidad que otorgan al vencimiento de cada pago y sus acciones, y los tiempos máximos para cada tipo de crédito.

Con base en lo anterior, se propuso analizar el costo de financiamiento de tres de los programas referidos en la tabla anterior, el resto, se descartó por lo siguiente: los intermediarios financieros con los cuales Nacional Financiera ofrece crédito, comprenden a las instituciones de la banca múltiple, sofoles y financieras ya consideradas en este análisis. En HSBC, el monto mínimo de ventas anuales solicitado para el monto requerido deberá ser superior a \$1, 500,000.00, HYRPYME que marca monto mínimo de ventas anuales superior a los \$2, 000,000.00. AFIRME , no tiene fondos, ni fecha de apertura de ventanilla.

Así, las instituciones y programas que se presentan como opción para este caso en particular son: Santander Serfin con crédito PYME, FOPRODE con financiamiento a proyectos productivos, y Fondo del futuro con el programa financiamiento a PYMES adelante. Esta información ayuda a conocer cuáles son las obligaciones y responsabilidades para la empresa al solicitar un financiamiento, la opción seleccionada es la ofrecida por Fondo del futuro a través de su financiamiento a PYMES teniendo como ventajas:

- 1. El monto otorgado cubre las necesidades financieras de la empresa.
- 2. El monto de las cuotas fijas de la amortización de pagos en cualquiera de los plazos expuestos puede ser cubierto con facilidad en base a las utilidades obtenidas por la empresa mensualmente, como referencia se tienen los datos de la utilidad mensual obtenida durante el mes Mayo 2010 al mes de Abril 2011.
- 3. La tasa de interés anual fija es del 8% a diferencia de las otras fuentes de financiamiento que parten desde el 8.5% hasta el 20% anual.
- 4. El interés es aplicado sobre saldos insolutos.
- 5. El tiempo máximo para el pago del crédito es de 60 meses sin penalización por pago anticipado.
- 6. El periodo de gracia adicional es hasta 6 meses.
- 7. Para montos menores a \$400,000.00 no es necesario un plan de negocios o estudio de factibilidad.
- 8. Flexibilidad en algunos documentos.
- 9. Asesoría directa y personal del centro de desarrollo empresarial CEDEVER para llenar la solicitud y realizar los trámites necesarios ante gobierno del estado.

institucion	nombre del credito	destino del credito	monto
nafin nacional financiera	programa crédito pyme	capital de trabajo o adquisición de activo fijo	dependiendo del intermediario financiero. el monto puede variar de 10 mil hasta 5 millones
hsbc	crédito a negocios	inventarios y equipamiento menor a las pymes de los sectores industria, comercio y servicios maquinaria y equipo para las pymes de los sectores	desde \$10, 000 hasta \$400,000
santander serfin	crédito pyme	industria, comercio y servicios activo fijo para las pymes de los sectores industria, comercio y servicios. cobertura (campeche, quintana roo, veracruz, yucatán)	desde \$50,001 hasta \$ 400 mil pesos
hyrpyme (sofol)	financiamiento maquinaria y equipo	maquinaria y equipo para las pymes de los sectores industria, comercio y servicios	desde \$250 mil hasta \$3 millones de pesos
afirme	crédito pyme	activo fijo para las pymes de los sectores industria, comercio y servicios	desde \$100 mil pesos hasta \$3.4 millones
foprode financiera	financiamiento a proyectos productivos	equipamiento, infraestructura, capital de trabajo; industriales, comerciales o de servicios, infraestructura productiva para pymes	de \$25 mil a \$1 millón de pesos, sin rebasar el 70% del costo del concepto sujeto a financiamiento
fondo del futuro	financiamiento a pymes adelante	créditos de habilitación o avío y refaccionarios, para empresas en operación o que presenten proyectos viables y rentables económicamente, y fomenten la creación de nuevos empleos y generen la derrama económica en el estado	\$120,000.00 hasta \$500,000.00. tasa fija anual del 8% anual

Tabla 2: Fuentes de financiamiento aplicables a este caso en particular

# CONCLUSIONES

Este trabajo permitió a la PYME en cuestión conocer en primer lugar el tipo de necesidad financiera que requiere, donde a partir de este conocimiento, pudo identificar, analizar y seleccionar los productos crediticios más adecuados que le permitan participar para la obtención de recursos económicos sin que ello le implique un riesgo financiero.

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# INNOVACIÓN DE LAS OPERACIONES LOGÍSTICAS EN LA EMPRESA REINDUSTRIAS

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# RESUMEN

El siguiente es un estudio de caso de tipo cualitativo y cuantitativo que tiene como objetivo evaluar el mejoramiento de la empresa Reindustrias inversiones Artunduga S.A. a partir de la implementación de herramientas de aprovisionamiento, almacenamiento y servicio al cliente. La unidad de análisis se limita a la empresa. Para la realización de este ejercicio se midió una línea base que consideró indicadores de aprovisionamiento, almacenamiento, transporte y distribución, servicio al cliente y costos logísticos. Posteriormente se realizó un diagnóstico donde se evidenciaron principalmente las falencias en el área de almacenamiento y aprovisionamiento. El método utilizado fue en principio la exploración y descripción de la forma cómo funcionaban los procesos en estas dos áreas de la empresa. Durante el desarrollo del estudio se implementaron herramientas de mejora para estas áreas y se evaluó si se logró un mejoramiento en el proceso logístico. Finalmente se realizó el análisis de resultados, contrastando la información final con la medición inicial. Este estudio confirma la utilidad de realizar mejoras como la planeación de las cantidades óptimas de pedido junto con el desarrollo de análisis de inventarios con el modelo ABC, el diseño de redistribución en planta, la paletización de la línea de lubricantes y la tecnología móvil GRPS-WAP y sistema SAG-XP, todo ello impactando la toma de decisiones y logrando el mejoramiento a nivel empresarial.

PALABRAS CLAVE: Aprovisionamiento, almacenamiento, mejoramiento continuo, logística.

# LOGISTICS OPERATIONS INNOVATION IN THE COMPANY REINDUSTRIAS

# ABSTRACT

The following case study is a qualitative and quantitative study aims to evaluate the improvement of the investment company Artunduga Reindustrias from implementing provisioning tools, storage and customer service. The unit of analysis is limited to the company. To perform this exercise was measured a baseline that considered indicators of procurement, warehousing, inventory, transportation, distribution, customer service and logistics costs. Diagnosis was subsequently performed which showed the flaws in the storage area and mainly supplies. The method used was in principle the exploration and description of the way the process worked and provisioning storage in the enterprise. During the course of the study were implemented improvement tools for this area and then evaluated whether improvement was achieved in the logistics process. Subsequently performed the analysis of results, contrasting the final information with the initial measurement. This study confirms the usefulness of improvements such as planning optimal order quantities along with the development of inventory analysis with the ABC model, the design of redistribution in plant palletizing line of lubricants, all for the taking decisions and achieve enterprise-wide improvement.

**JEL:** L11, L14, L19, L29, L69, L91, M14, M41, O18, R41

KEYWORDS: Procurement, storage, continuous improvement, logistics.

#### INTRODUCCION

Reindustrias Inversiones Artunduaga S.A. está ubicada en la ciudad de Neiva. Cuenta con una trayectoria de más de 40 años. Actualmente presta servicios de superserviteca, lavado, taller, distribución exclusiva para la zona de llantas Goodyear y lubricantes Shell. Es almacén de repuestos concesionario Hyundai y presta el servicio de alquiler de equipo petrolero. La empresa tiene un área aproximada de 2.300 m2, los cuales se utilizan para el almacenamiento de llantas y lubricantes.

Esta empresa tiene un excelente desarrollo organizacional y una tendencia al crecimiento. A nivel estratégico se tienen metas bien definidas. Sin embargo, en aspectos como Gestión Logística y Responsabilidad Social, existen muchas posibilidades de mejora, ya que los procesos no están completamente definidos. Su operación estaba conformada por tres eslabones de la Cadena de Suministro: Aprovisionamiento, Almacenamiento e Inventarios y Servicio al cliente.

En el año 2010, se tenían altos costos en los procesos relacionados con la gestión de compras y almacenamiento, debido a las ineficiencias que a continuación se describirán. Por lo anterior, desde la Alta Dirección, se decide realizar un análisis general de la empresa tanto a nivel estratégico como operativo para que se efectúen las soluciones logísticas adecuadas para alcanzar nuevas ventajas competitivas alineadas con la estrategia. Una limitante era que el software de gestión utilizado en la empresa no cubría las necesidades de información de la compañía provocando unos procesos excesivamente manuales y duplicidades de tareas entre las áreas. Había mucha información que no se podía consultar en tiempo real y por ejemplo, para conocer el nivel de stock de determinados productos se tenía que ir al almacén e inspeccionarlo de manera visual. Se tomaban decisiones de compras sin ninguna base estadística o sistema de información sino que el encargado de compras gracias a su conocimiento del mercado realizaba las solicitudes de pedidos, es decir no existía una política de compras, esto provocaba la imposibilidad de realizar análisis sobre la rotación de productos tanto para comprar las cantidades correctas como para su disposición física en el almacén. Por ejemplo, si una referencia no rotaba, de todas maneras esta se pedía a criterio de la persona.

El principal objetivo de Reindustrias fue el de mejorar el nivel de servicio esperado. Es así como se decide capacitar al Jefe de Bodega con un curso en Estrategia competitiva de repuestos. Este incluyó una previa evaluación y análisis para la implementación del sistema de clasificación ABC de los productos, implementación de un sistema de información ERP, para el cálculo de las previsiones de demanda (SAG-XP), así como el uso de la tecnología móvil GRPS - WAP y hacer M- commerce estableciendo un contacto más directo y efectivo con el cliente brindándole la información que necesita en tiempo real, posibilitando la realización de ventas on line. Esta investigación tiene la siguiente organización. En la sección de revisión de la literatura se plantean los argumentos que sustentan la utilización de las herramientas Matriz DRP, distribución en planta, clasificación ABC, tercerización de la distribución. Posteriormente se presenta la metodología utilizada, en donde se describe el por qué se seleccionaron las herramientas y las razones de implementar la tecnología móvil WAP para la fuerza de ventas externa. Después de lo anterior se presentan los resultados de la investigación. Finalmente las conclusiones, limitaciones y futuras recomendaciones de investigación.

# **REVISIÓN DE LITERATURA**

Para lograr un desempeño logístico óptimo se pueden mejorar las estrategias de aprovisionamiento con la medición del Trade Off, que es la medición de los tiempos de entrega de aprovisionamiento y la Evaluación de los proveedores en términos de calidad, confiabilidad, precio, etc. (Gómez, 1996; Del Rio, 2002; Heredia, 2007; Makridakis y Wheelwright, 1994; Montoya, 2002); en almacenamiento se deberían calcular cantidades óptimas de pedido (Muller, 2004; Ballou, 2004; Casanovas y Cuatrecasas, 2003; Sunil y Meindl, 2008; Soret, 2004; Presencia, 2004). Dentro de los principales costos de almacenamiento se

encuentran el manejo de inventarios, empaques, embalajes, costos financieros y stock averiado, entre otros (Mauleón, 2006). Algunos autores hacen énfasis en la importancia de disminuir inventarios, realizar clasificaciones según rotación de las mercancías y tratar de alcanzar el justo a tiempo, reduciendo las cantidades almacenadas de producto (Ballou, 2004; Carranza, 2005; Christopher, 2000; Casanovas y Cuatrecasas, 2003; Chase, Jacobs, y Aquilano, 2009; Durán, 2001; Martin, 1999; Sunil y Meindl, 2008; Soret, 2004). Otros autores sugieren el análisis de la distribución y análisis de entorno macro y micro para mejorar los negocios (Díaz, 1997; Newell, 2001; Serna, 1996; Serna, 1999).

En la actualidad el comercio electrónico es una gran oportunidad de negocio en el contexto global (Abuhamdieh, Kendall y Kendall, 2008; Carnaghan, Downer, Klassen, y Pittman, 2004; Chan, Al-Hawamdeh, 2002; Kolettis, 2001; Lo, 1999; Piturro, 1999; Weil, 2000; Willis, 2004. Algunos factores como la confiabilidad, la distribución, las distancias y la forma de pago afectan el crecimiento de los negocios electrónicos (Chen y McQueen, 2008; Sumanjeet, 2010; Duffy y Dale, 2002; Fryad Henari y Mahboob, 2008; Kabanda, y Brown, 2010; Subramani y Walden, 2001; Ratnasingam, 2005); los modelos electrónicos son accesibles a las pequeñas empresas (Lopez-Bassols y Vickery, 2001; Lopresti, 2007; MacGregor y Vrazalic, 2006; Plana, Cerpa y Bro, 2006).

# METODOLOGIA

El ejercicio realizado es un estudio de tipo descriptivo, correlacional y explicativo, que permitirá inferir juicios sobre el impacto de la implementación de la matriz DRP, que busca planificar la distribución de los recursos. El DRP se dirige principalmente a mejorar la gestión del inventario de producto final y el control del transporte de productos en la cadena de distribución. Por otra parte el estudio del costo de un vehículo identifica y controla los costos asociados al uso de vehículos en el proceso de distribución. El estudio de la redistribución en planta y clasificación ABC permite mejorar la ubicación de los productos en el almacén. En cuanto al alcance, la investigación es de carácter mixto. En principio es cuantitativa por ser ya que se mide una línea base de entrada y en un segundo momento una línea base de salida, con indicadores verificables. También es de carácter cualitativo ya que se evidencian los problemas en la empresa por visita directa. La investigación es de tipo longitudinal porque los datos se recolectan en dos momentos en el tiempo. Finalmente todo el procedimiento termina en un tipo de investigación explicativa porque se comprobará la hipótesis de que a partir de la implementación de herramientas logísticas es posible lograr el mejoramiento empresarial. La hipótesis que se plantea es que el conocimiento de los costos logísticos de la organización y la implementación de las herramientas en los procesos de las diferentes áreas impactan en el nivel de servicio y por tanto en la rentabilidad de la organización.

Para la medición de la línea base se realizó un diagnóstico a la empresa. En éste se analizó un parámetro especifico como es la gestión logística, en donde pudo observarse que se tienen niveles de gestión muy básicos así como las debilidades y áreas a mejorar en sus operaciones logísticas. En un segundo momento se evaluaron los indicadores de cada uno de los componentes de la cadena de suministro. Finalmente se identificaron los costos logísticos para implementar un plan de mejoramiento.

Este diagnóstico permitió conocer de manera más cercana la operación de la compañía y sus necesidades específicas concentradas en el aprovisionamiento y almacenamiento, factores que estaban afectando el servicio al cliente. Es así como se inicia un estudio para mejorar y controlar todas las actividades de almacenamiento desde la compra de los productos hasta su entrega final a los clientes. En este proceso se observó la capacidad real de almacenamiento de la bodega de repuestos analizando la redistribución en planta y análisis ABC donde se logró establecer el área interna óptima para controlar que los movimientos físicos de los productos se hicieran de manera eficiente y que los desplazamientos del personal requirieran mínimas distancias y un flujo con pocos retrocesos, logrando de esta manera hacer eficiente el uso del espacio y mejorando el nivel de servicio esperado. El almacenamiento de lubricantes se hacía en forma indiscriminada sin tener en cuenta que este tipo de producto viene en canecas, por lo cual tiene la

probabilidad de sufrir abolladuras. Además durante el transporte que el proveedor hacía también se presentaba este tipo de daños generándose pérdidas para los proveedores de Reindustrias por las devoluciones efectuadas por la empresa. Estas devoluciones correspondían al 2% de las ventas que en promedio sumaban 600 millones mensuales.

Tabla 1: Aspectos evaluados en la empresa Reindustrias Inversiones Artunduaga S.A.

indicadores de aprovisionamiento	indicador de servicio al
	cliente
lpedidos efectivos	10 entregas perfectas
2entregas a tiempo	11 indicador de quejas de clientes
3desabastecimiento	12 devoluciones
4nivel de intermediación	13 revisión de ordenes de compra
indicadores de almacenamiento	indicadores de inventario
5capacidad utilizada	14 índice de rotación de mercancías
6costo por metro cuadrado	15 índice de mercancía averiada
indicadores de transporte y	indicadores de costos
distribución	logísticos
7incidencias de pedido	16 costos logísticos totales
8costo de transporte	17 ventas perdidas
9seguridad industrial en el transporte	•

Esta tabla muestra los 17 aspectos evaluados en la empresa Reindustrias Inversiones Artunduaga S.A.- al realizar el diagnóstico de la situación logística.

En el almacén había un layout que no se había replanteado, se sabía que producto rotaba y cual no, y se sabía que tipos de referencia habían en existencia pero no se sabía dónde estaba ubicada físicamente, perdiéndose ventas por la dificultad de la ubicación física de las mercancías en el almacén. Además algunos productos de repuestos apilados sin estanterías no permitía tener un almacén con una filosofía FIFO (First In First Out), provocando una rotación inadecuada de los productos y por tanto que hubieran artículos sin rotación durante largos periodos en el almacén, aumentando considerablemente la presencia de artículos obsoletos. Se perdía en promedio un 2% mensual de las ventas. Una acción de mejora fue la de capacitar durante año y medio al Jefe de Bodega con un diplomado en Estrategia competitiva de repuestos. Esta incluyó una previa evaluación y análisis para la implementación del sistema de clasificación ABC de los productos y una adecuación de las estanterías para almacenar las referencias de repuestos que se apilaban sin ningún criterio.

En el área de servicio al cliente el grupo de vendedores externos, al momento de cubrir las diferentes zonas de venta y visitar sus principales clientes para realizar los pedidos durante su jornada laboral, lo hacían de manera manual y tardía, incumpliendo con las especificaciones de atención a los clientes que cada vez son más exigentes con la entrega oportuna de sus pedidos. Finalmente, La carencia de una visión global de los procesos logísticos por parte de la empresa estaba generando ineficiencias en todo el proceso. Para conocer la estructura de los costos logísticos de la empresa se calcularon los costos asociados a la labor de toda la cadena de suministro, como los costos de ordenar un pedido, costos de mantener inventario, costos de almacenar, distribuir y el costo del servicio al cliente. Conocer los costos logísticos y el impacto financiero permitió a la empresa desarrollar estrategias para la optimización de los mismos. Para esto se propuso una estructura de Plan de Mejoramiento Logístico que incluye: problema, actividad, descripción de la actividad, meta, indicador, cronograma, fuente de financiación y resultado. Para conocer la distribución de los costos logísticos de la organización se realizó el ejercicio de calcular los costos logísticos como se muestra en la figura 1.





Esta figura muestra la distribución de los costos l logísticos en la empresa REINDUSTRIAS.

77%

La estrategia de desarrollar la metodología de estimar cantidades optimas de pedido e implementar un sistema de gestión de inventarios (SAG-XP) y de pasar de una toma de pedidos manual a usar tecnología móvil WAP para elaboración de pedidos por parte de la fuerza comercial externa, hace que se cumpla con la promesa de servicio.

ALMACENAMIENTO DISTRIBUCIÓN

SERVICIO AL CLIENTE

# **RESULTADOS**

14%

La empresa identificó donde estaban los costos más altos de toda la operación. Fue así que para octubre Reindustrias Inversiones Artunduaga, reconoció que los costos logísticos se centraban principalmente en Aprovisionamiento con un 77% y Almacenamiento en un 14%, la empresa no estaba almacenando de manera adecuada los productos de repuestos, razón por la cual al momento de atender una venta del mostrador no se respondía de forma inmediata cuando el cliente solicitaba un producto, pues no se encontraba en inventario por lo cual no se podía cumplir con la promesa de servicio, esto implicaba costos más altos a los que comúnmente se manejaban por no ubicar el producto en el almacén. El procedimiento consistió en clasificar los productos, logrando demostrar la manera de cómo se pueden optimizar los recursos financieros en la mejora de sus procesos de compra y por ende la liberación de capital, mediante el desarrollo y análisis de inventarios con el modelo ABC, aplicado a la gestión de aprovisionamiento.

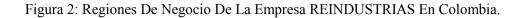
En este proyecto de mejora logística se recomendó a la empresa implementar las herramientas distribución en planta, y continuar con la implementación de la Matriz DRP, adicionalmente se motivó a la empresa a continuar realizando evaluación y clasificación de proveedores que les permita una evaluación más objetiva y proveedores más confiables. Posteriormente se examinaron los resultados obtenidos mediante la utilización de las herramientas. Por ejemplo, la herramienta de estimación de costos logísticos le proporcionó a la empresa la información necesaria para tomar decisiones como la tercerización del almacenamiento de llantas y lubricantes, ubicando centros de distribución en cinco departamentos. Así mismo se decidió sobre la tercerización de la distribución, para poder alinear la promesa de servicio ofrecida a los clientes, de acuerdo a la capacidad real tanto de la empresa como de sus proveedores. Por otro lado se retomó la información de los Indicadores de Inventarios y la información de la Matriz DRP para la línea de lubricantes, con el objetivo de pronosticar tendencias de comportamiento de la demanda. Esto permitió solicitar pedidos con anticipación de manera adecuada.

Los centros de distribución están ubicados en cinco estados que son Putumayo, Caquetá, Huila, Tolima y Cundinamarca. La forma de entrega es a través de la tercerización de la distribución con el fin de disminuir los costos de transporte. Estos centros de distribución en realidad son proveedores en cada ciudad, cumpliéndole al cliente final con la promesa de servicio vendida por la empresa, con la calidad solicitada, en el tiempo pactado, las cantidades solicitadas, con la documentación legal y el precio acordado. La empresa desarrolló una importante mejora en el área de atención al cliente aumentando un 5% el nivel de las ventas. Esto se debió a la implementación de la tecnología WAP para toma de pedidos en línea por parte de la fuerza de ventas externa. Esta innovación es una de las ventajas competitivas desarrolladas por la empresa siendo un punto de diferenciación importante en el mercado al cual pertenece. La empresa en el año 2012 logró identificar las actividades que limitaban el eficiente desempeño del área de compras y almacenamiento es así como consideró inapropiado el software de gestión utilizado, por lo que se hizo necesario implementar un sistema de información ERP para el cálculo de las previsiones de demanda (SAG- XP), capaz de gestionar eficaz y eficientemente el flujo de información requerida con un módulo adicional de costos logísticos.

Actualmente se tiene establecida la política de compras. Para realizar un pedido se tiene en cuenta la cantidad que se va a vender, así como otros factores como el stock en el almacén, el plazo de entrega del proveedor, y las restricciones comerciales como la cantidad mínima o máxima por pedido. De esta forma se ha logrado planear las cantidades óptimas de pedido, y junto con el desarrollo de análisis de inventarios con el modelo ABC aplicado al proceso de aprovisionamiento, optimizar los recursos financieros. En el almacén actualmente se cubren todas las referencias antiguas y nuevas y se tienen únicamente los repuestos de las líneas que más rotan, lo que no se encuentra en el inventario se consigue a través de los distribuidores a nivel nacional. Para los pequeños productos sueltos sin paletizar se compraron 10 estanterías con separadores modulares garantizando el correcto almacenamiento, fluidez en los inventarios y cuidado de la mercancía. Se logró contabilizar en total 4.850 referencias, actualmente se tiene el 100% de los productos del almacén sistematizados y clasificados.

En la línea de llantas se están haciendo actualmente pedidos teniendo en cuenta el nivel de rotación del inventario teniendo como política de inventario contar con dos meses de producto debido a la variación de los precios. Anteriormente se tenían inventarios de referencias que no rotaban durante un año, hoy en día no superan los seis meses, optimizándose el 50% de los inventarios de llantas. La relación de colaboración entre proveedores permitió establecer un sistema de paletización para el almacenamiento de los lubricantes con el fin de eliminar o reducir las devoluciones por daño de la mercancía.

En el área de servicio al cliente se inició el plan piloto de implementación de proyectos de tecnología, evitando la pérdida de imagen, eficacia en las ventas, clientes no satisfechos y falta de competitividad en el mercado. Para optimizar el escenario mostrado se hizo necesario realizar una gran inversión implementando el uso de la tecnología móvil GRPS - WAP y hacer M- commerce cambiando la forma de hacer la labor de ventas, estableciendo un contacto más directo y efectivo con el cliente brindándole la información que necesita en tiempo real, accediendo a ellos mediante un dispositivo móvil o celular para hacer consultas de bases de datos y con una mayor rapidez y confiabilidad hacer la toma de pedidos y control de stock. Dentro de los resultados relevantes para la empresa se tiene la instalación de un software de gestión logística, disminución del stock medio de la línea de llantas en un 24,5%, mejora de los costos de los procesos logísticos en un 10%, aumento de la satisfacción del equipo humano gracias a tener procesos colaborativos claramente definidos, disponibilidad de información en tiempo real para la toma de decisiones, adecuado sistema de almacenamiento de los productos de lubricantes y organización de las estanterías del almacén. Mejorar el promedio de ventas de 37000 dólares mensuales a 58000 dólares mensuales. El crecimiento anual era del 17% hoy en día es del 34%. En la actualidad la empresa tiene ventas en cinco departamentos del país, lo cual demuestra su capacidad de apertura de nuevos mercados en algunos departamentos del sur de la región andina, como lo podemos observar en la Figura 2.







Esta figura muestra como el mayor porcentaje de ventas de REINDUSTRIAS INVERSIONES ARTUNDUAGA S.A. está en la región Andina, siendo que la ubicación principal se encuentra en el departamento del Huila.

# CONCLUSIONES

Esta investigación se centró en la aplicación de las herramientas, distribución en planta, costos logísticos, matriz DRP, complementado con el desarrollo del modelo de análisis ABC para inventarios. El análisis realizado a REINDUSTRIAS, sirve como apoyo a la toma de decisiones sobre el tipo de herramientas que pueden implementar organizaciones con características similares para mejorar su nivel de servicio logístico, mejorando su competitividad y desempeño en el mercado.Al realizar la medición de salida se concluye que al haber implementado las herramientas de clasificación ABC, Matriz DRP y Cálculo de Costos Logísticos, se obtuvo el resultado de mejorar la rotación de los inventarios optimizándolos y de tercerizar la operación de distribución, permitiendo mayor flujo de dinero para la empresa.La implementación de tecnología WAP permite disponer de información en tiempo real para la toma de decisiones y cumplir así la promesa de servicio a los clientes.

La implementación de un software logístico ayuda a controlar la eficiencia de las operaciones logísticas y mejorar la calidad y capacidad de respuesta. La principal dificultad que se encontró fue la de no tener una cultura de medición para la recopilación de los indicadores de gestión logística de la línea base que permitan la toma de decisiones y realizar acciones de mejora continua.En estudios futuros se recomienda

a la empresa implementar la herramienta de Trade Off que proporcione información sobre el tiempo de respuesta efectivo para poder alinear la promesa de servicio ofrecida a los clientes, de acuerdo a la capacidad real tanto de la empresa como de sus proveedores.Especialmente destacable es la metodología de gestión del cambio utilizada por la alta dirección, elemento clave para el diseño e implementación del plan de mejora logístico.

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# RESUMEN

Hoy en día las empresas deben contar con una planeación estratégica que les permita tener una visión, para el autor Steiner (2005) el plan estratégico es el proceso por el cual los miembros de una organización prevén su futuro y desarrollan los procedimientos para alcanzarlo. Por lo antes mencionado se realizóuna investigación en unCentro de Producción Acua-Agrícola (CEPROAA) en el Sur del estado de Sonora México, donde mediante la aplicación de entrevistas, observación directa y diagnósticos se detectó la carencia de una planeación estratégica, de ahí surge la siguiente interrogante para contrarrestar dicha situación: ¿Es factible la implementación de un plan estratégico para un sistema de producción en el que se integre la actividad acuícola con la agrícola en la comunidad de Benito Juárez?. Para dar respuesta a la pregunta se realizó una planeación de donde se obtuvo una Misión, Visión, Valores, Organigrama, las fuerzas competitivas según Porter (2003), Análisis de la situación actual, Análisis PESTA, Diagnóstico de la organización, Cadena de valor, Análisis interno, externo y FODA, Balanced Scorecard (BSC) del autor Kaplan, y Norton(2010), Mapa de las 4 perspectivas, Mapa estratégico y las Guías de monitoreo y control.

**PALABRAS CLAVE:** *Planeación estratégica, producción Acua-Agrícola sustentabley Sur de Sonora México.* 

# STRATEGIC PLAN FOR A CENTER OF AQUA-AGRICULTURAL PRODUCTION SUSTAINABLE IN THE REGION OF THE SOUTH OF SONORA

# ABSTRACT

Nowadays companies must have a strategic planning process that will allow them to have a clear vision, for Steiner (2005) the strategic plan is the process by which the members of an organization provide for their future and develop procedures to achieve it. Based upon the latter, an investigation was carried on at The Aqua-Agricultural Production Center (CEPROAA) in the Southern State of Sonora, Mexico. This research involved the application of interviews, direct observation and diagnostics and detected the lack of strategic planning, hence the following question arises to counteract such situation: Is it feasible to implement a strategic plan for the production system in which aquaculture is integrated with agriculture activities in the Benito Juarez community area? Planning took place in response to the question of where he obtained a mission, Vision, values, organization chart, the competitive forces according to Porter (2003), analysis of the current situation, Analysis (TAB), diagnosis of the Organization, chain value, internal, external analysis and (SWOT), Balanced Scorecard (BSC) of the Kaplan and Norton (2010) author, map of the 4 perspectives, strategy map, Gantt chart (activities) and Guides of monitoring and control.

#### **JEL:** M10, Q01, Q13, Q16.

**KEYWORDS:** Strategic planning, Aqua-Agricultural, South of Sonora Mexico and sustainable production.

# INTRODUCCIÓN

Hoy en día en cuenta que los agronegocios se han convertido en motores de la economía en el siglo XXI, representando un 50% del comercio global, por lo que se considera como un conductor de desarrollo económico, mismos que estimulan a otros giros relacionadas con esta actividad. En la actualidad, los elementos administrativos claves de cualquier empresa u organización son los individuos, la estructura, la tecnología, el ambiente interno y externo, así como la información; los directivos requieren de ésta última como fundamento para enfrentarse y superar los cambios del entorno y sobre todo los que provoca la competencia y los que el fenómeno de la globalización implica. Los empresarios que no cuentan con la información necesaria para tomar decisiones adecuadas y oportunas, pondrán a su negocio en una posición de desventaja frente a sus competidores, además serán incapaces de resolver con bases sólidas la incertidumbre y los problemas de índole administrativa que se presenten, la información que se obtiene como resultado de aplicar coherentemente el proceso de planeación.

# **REVISIÓN LITERARIA**

Argumentando dicha investigación Chiavenato, (2002) establece tres niveles de la planeación, los cuales consisten en planeación estratégica, táctica y operacional, así mismo Mercado, (2001) argumenta la misma clasificación. Por otro lado según Koontz y Weihrich (2005) la misión es la razón de ser de la organización, es a donde va encaminado el futuro de la misma, así mismo menciona que la visión es la imagen idealizada del futuro el cual está dirigida la organización, dónde se describe la razón por la cual existe la empresa, satisfaciendo las necesidades de los clientes con los productos y servicios que ofrece la empresa y por último según Hernández y Pulido (2002) argumentan que los valores son todas aquellas convicciones que tienen las personas y que conforman sus puntos de vista de lo que es y debe de ser importante, bueno, malo, correcto o equivocado. Según Mercado (2000), describe que los objetivos son fines o propósitos hacia los cuales se debe dirigir los esfuerzos de un grupo humano. Para Chiavenato (2002), las estrategias son la determinación de los objetivos básicos a largo plazo de una empresa y la adopción de los cursos de acción y la asignación de recursos necesarios para su cumplimiento. La planeación estratégica según Porter (2003) dice que todo planteamiento se resume en saber las fortalezas. oportunidades, debilidades y amenazas, este es el nivel fundamental y decisivo en el proceso de la planeación estratégica de una organización. Complementando el concepto según Kaplan & Norton (2010) propone establecer el Balance Scorecard (Tablero de control) y el mapa estratégico de la empresa que ayuda a los altos ejecutivos a medir los sistemas, debido a que afecta fuertemente al comportamiento de los gerentes y empleados.

# METODOLOGÍA

#### Planteamiento Del Problema

Debido al interés de la Institución por buscar nuevas alternativas que incrementen la producción y rentabilidad del campo agrícola, así como coadyuvar con productores de las comunidades rurales para que diversifiquen sus actividades tradicionales de agricultura temporal, y en la búsqueda de promover el autoempleo y la producción de alimentos libres de agroquímicos (productos orgánicos), se cuestiona: ¿Es factible la implementación de un plan estratégico para un sistema de producción en el que se integre la actividad acuícola con la agrícola en la comunidad de Benito Juárez? Para ello, con este proyecto se

cultivan de manera hidropónica productos hortícolas y acuícolas, empleando un sistema de recirculación con agua dulce para optimizar el empleo del agua, suelo y el espacio.

*Justificación:* Debido a que el propósito de este proyecto es desarrollar un cultivo integral entre la tilapia y el tomate, es necesario garantizar que la tilapia suministre los nutrientes necesarios para el crecimiento de las plantas, tiene que desarrollar eficientemente el proceso operativo del Centro de Producción, desde el cultivo de la tilapia, preparación del tanque, aclimatación y siembra, alimentación, etc. Siendo un objetivo del Centro, el compromiso social de promover la implementación de este tipo de sistemas de producción entre los habitantes de la región, para contribuir al autoempleo, a la producción y consumo de los cultivos altamente proteicos en beneficio de la salud y de la economía familiar, promoviendo el uso sustentable de los recursos naturales.

*Objetivo*: Diseñar un plan estratégico para un Centro de Producción Acua-Agrícola (CEPROAA), mediante la realización de un análisis interno y externo con la finalidad de implementarlo en la comunidad del Municipio de Benito Juárez.

*Delimitaciones* : Para este proyecto, se desarrolla un sistema de producción que se busca sea eficiente en el manejo del recurso agua, combinando la actividad acuícola con la agrícola para producir de manera integral tilapia negra (*Oreochromis niloticus*) con cultivos hidropónicos de tomate bola (*Lycopersicum esculentum*) en un sistema de recirculación de agua dulce. Implementándose en la Universidad Estatal de Sonora Unidad Académica Benito Juárez, sólo con recursos propios de la Institución y con apoyos Estatales, buscando otras fuentes de para la obtención de recursos Federales que se gestionan para su eficiente operación.

# <u>Sujeto</u>

El presente trabajo de investigación se realizó en el Centro de producción Acua-Agrícola en la Universidad Estatal de Sonora, Unidad Académica Benito Juárez, en donde los integrantes del proyecto proporcionaron información requerida para la elaboración del plan estratégico, dicho proyecto productivo es desarrollado por maestros investigadores de la universidad.

*Materiales:* Para la realización de esta investigación, se requirieron de algunos materiales que ayudaron y apoyaron a lograr el desarrollo del modelo de planeación estratégica, como entrevistas abiertas con los integrantes del proyecto, asesoría de maestros del Instituto Tecnológico de Sonora y expertos en los temas abordados. Para la recopilación de información, se utilizaron cuestionarios de preguntas abiertas a los docentes involucrados, los cuales estuvieron enfocadas a las expectativas que tienen del proyecto, la panorámica futura de hacia dónde quieren llegar, la situación actual del mismo y el plan de acción a utilizar para iniciar operaciones, cabe mencionar que de las entrevistas abiertas, se obtuvo información sumamente importante, que ayudó a conocer más a éste proyecto productivo, otro método al que se recurrió fue al de observación, y consultas de fuentes directas como libros y páginas web cuyos autores y páginas se encuentran en la sección de bibliografía.

*Procedimiento:* Como inicio de la investigación se realizó una plática con el Coordinador general del proyecto y el Supervisor de producción para conocer la situación actual del Centro de Producción Acua-Agrícola, leer el proyecto, posteriormente se propuso el trabajo a desarrollar, el cual fue elaborar un modelo de Planeación.

Por último, se llevaron a cabo los pasos para desarrollar la planeación estratégica:

- 1. Se realizó una junta con los integrantes del proyecto para determinar la misión, visión y valores de la empresa.
- 2. Se realizó un diagnóstico interno y externo para el centro.
- 3. Se elaboró el diagnóstico de la organización.

- 4. Se realiza el Mapa de las cuatro Perspectivas del Centro de Producción Acua-Agrícola.
- 5. Se elaboró el Balanced Scorecard o tablero de control.
- 6. Se presenta a los integrantes la planeación estratégica desarrollada.

#### RESULTADOS

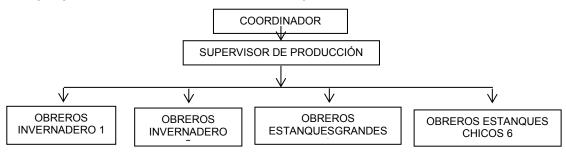
Misión: La Misión de (CEPROAA) es integrar el cultivo de manera hidropónica la actividad acuícola y hortícola, empleando un sistema de recirculación de agua, que a su vez optimice los recursos naturales con los que se cuenta, incrementando la productividad y promoviendo la implementación de este tipo de sistema de producción entre los habitantes de la región del Sur del Estado de Sonora.

*Visión:* La Visión del Centro de Producción Acua-Agrícola, es ser líder en la implementación de los sistemas de cultivo hidropónico, integrando la actividad acuícola y hortícola para la producción y comercialización de productos orgánicos, siendo un agente clave en la transformación de comunidades marginadas contribuyendo al autoempleo y autoconsumo en el Sur del Estado.

Valores:

- ☑ <u>Integridad:</u> Por la combinación de los sistemas de producción para la obtención de un producto sustentable.
- ☑ <u>Calidad</u>: Se realiza el proceso de cultivo mediante controles de inocuidad para la obtención de productos orgánicos.
- Competitividad: El cultivo hidropónico de los productos orgánicos de CEPROAA, por su naturaleza lo hacen competitivo con otros productores, debido a sus bajos costos.
- Trabajo en equipo: La colaboración y la comunicación eficiente de los integrantes del Centro de Producción Acua-Agrícola, hacen que el equipo de trabajo esté integrado para el cumplimiento de la misión y visión. *Fuente: Elaboración propia*.

Figura 1: Organigrama del Centro de Producción Acua-Agrícola.



En esta figura se muestra la representación gráfica de cómo está organizado el Centro de Producción Acua-Agrícola, por medio de un organigrama donde se observa la estructura organizacional del mismo. Fuente: Elaboración propia.

# Tabla 1: Análisis FODA de "CEPROAA".

FACTORES	FODA	4
	FORTALEZAS	DEBILIDADES
	Es un proyecto de innovador tanto para la región como para la Institución.	♯Es un proyecto de nueva creación, por lo que requiere de un Plan Estratégico.
Internos	Se cuenta con la experiencia de los integrantes del proyecto en la operación y comercialización de los productos y servicios.	<ul> <li>Cuenta con poco equipo para su operación.</li> <li>Hay escaso financiamiento pata la materia prima e insumos.</li> </ul>
	El trabajo se desempeñará con la labor directa de los docentes del proyecto y con el apoyo de alumnos.	<ul><li>♯Falta de apoyos económicos para el proyecto.</li><li>♯No cuenta con un plan de publicidad y promoción del</li></ul>
	El cultivo de la tilapia y tomate por medio del sistema	Centro y sus productos.
	hidropónico, es una nueva alternativa de producción. Se cuenta con asesoría externa de expertos.	HNo cuenta con un estudio de factibilidad económica - financiera del proyecto.
	<ul> <li>Ise cuenta con asesoria externa de experios.</li> <li>Las granjas pueden estar más cerca del mercado, disminuyendo distancias y costos de traslado.</li> </ul>	Innanciera del proyecto. INO existen programas de capacitación para el personal que maneja el CEPROAA.
	<b>OPORTUNIDADES</b>	AMENAZAS
Externos	<ul> <li>Cambio de estilo de vida en el consumo de productos orgánicos en la sociedad y en la región.</li> <li>Iniciar operaciones en un corto plazo y para la penetración</li> </ul>	<ul> <li>Condiciones ambientales: Huracanes, inundaciones, heladas, sequias, plagas, enfermedades, etc.</li> <li>Escasez de materia prima por algún acontecimiento.</li> </ul>
	de nuevos mercados.	#Debilidad del precio de los productos frente a la
	<ul> <li>Aplicar tecnologías al proyecto para su automatización.</li> <li>Es fácilmente adaptable, por lo que se pueden crear nuevos centros de producción en la comunidad.</li> </ul>	competencia desleal e importaciones.
	Comercializar la idea a productores para que lo implementen a gran escala.	<ul><li>Aumento de inseguridad en la región.</li><li>Aumento de la inflación y el desempleo.</li></ul>

En esta tabla se muestra el desglose de las fortalezas, oportunidades, debilidades y amenazas que surgieron después de analizar los factores internos y externos del Centro de Producción Acua-Agrícola. Fuente: Elaboración propia.

#### Tabla 2: Diagnostico de análisis interno de "CEPROAA".

ANÁLISIS INTERNO	FORTALEZAS	DEBILIDADES
Procesos	sencillo (Cadena de valor).	* Establecer procedimientos de trabajo en las diferentes funciones del centro.
	El centro es pequeño y se pueden identificar posibles mejoras.	*No hay algún financiamiento para implementar una tecnología que agilice los procesos del Centro.
Organización	Buena comunicación y lealtad con los trabajadores.	*No se cuenta con un programa de capacitación anual y falta consolidar la estructura organizacional.
	<ul> <li>Experiencia en el ramo y 2 años operando en la universidad, aparte de contar con investigación</li> </ul>	<ul> <li>No hay instrumentos de medición de la productividad.</li> <li>No se ha documentado los procesos con manuales.</li> </ul>
	✓ Variedad en la producción acuícola y hortícola.	*La publicidad y promoción es nula al no contar con un plan
	El centro tiene una buena ubicación estratégica en la región sur de Sonora.	<ul> <li>de marketing.</li> <li>*Formalizar los recursos humanos con la implementación de uniformes y gafetes de identificación.</li> </ul>
	Cuentan con tecnología en la comunicación como	* Falta de elaboración de redes sociales de comunicación con
Tecnología	radios y celulares aparte de computadoras para desarrollar sus labores	clientes que les faciliten las ventas. *No se cuenta con la aplicación de la tecnología para automatizar los procesos.
Cadena de valor	☑ Se tiene una cadena de valor bien definida y establecida del centro para enfocarse en las	×No se ha realizado una planeación estratégica en las diferentes áreas de la empresa.
	prioridades que vayan surgiendo en esas áreas.	*No se cuenta con una misión y visión clara en cuento al futuro del Centro

En esta tabla se muestra el análisis interno que se realizó en el Centro de Producción Acua-Agrícola, donde se toman en cuenta los procesos, organización, tecnología y cadena de valor para determinar las fortalezas y debilidades que presenten. Fuente: Elaboración propia.

Tabla 3: Diagnóstico de análisis externo de "CEPROAA". (P.E.S.T.A. y 5 Fuerzas Competitivas de Michael Porter.)

		FORTALEZAS	DEBILIDADES
ANÁLISIS EXTERNO		ANÁLISIS PES	ТА
Político	Ø	Apoyos por parte del gobierno federal y estatal para proyectos productivos.	♯Poca información de apoyos federales para desarrollar proyectos productivos.
Económico	1 1 1	El centro es estable por el presupuesto asignado. No se tiene deudas con bancos, proveedores, etc.	<b>#</b> No ha adquirido un plan de financiamiento para inyectar dinero al Centro.
Social	1 1 1	P P P	<ul> <li>Poco tiempo de estar operando en la región.</li> <li>Se le ha dado poca publicidad en los productores y la sociedad.</li> </ul>
Tecnológico	V		
Ambiental	$\checkmark$	Desarrollo de un proyecto sustentable. Producción de productos orgánicos. No necesita de grandes cantidades de agua y tierra para producir.	<ul><li>♯Factores climatológicos.</li><li>♯Plagas.</li></ul>
		FUERZAS COMPETITIVAS DE	MICHAEL PORTER
Rivalidad en la industria	V	Hay muy pocos competidores en el mercado y se tienen identificados.	
Poder de los proveedores	V	Existen instituciones bien definidas que proveen los insumos para el cultivo tanto de la tilapia como del tomate.	#El costo del equipo y mantenimiento del
Poder de los compradores	Ø	El precio del producto en el mercado será accesible a los clientes, debido a bajos costos por la optimización de los recursos utilizados.	<ul> <li>La variedad de productos sustitutos en la tilapia y tomate.</li> <li>Hay numerosos productores en la región en ambientes controlados y al aire libre.</li> </ul>
Nuevos entrantes	Ø	En la región no hay productores de cultivos de tilapia negra y tomate orgánico.	
Productos sustitutos	V	Los productos sustitutos no son de la calidad que tiene la tilapia negra y el tomate, debido a los agroquímicos que utilizan.	1 5

En esta tabla se muestra el análisis externo que se realizó en el Centro de Producción Acua-Agrícola, donde se toman en cuenta los aspectos político, económico, social, tecnológico y ambiental, así como las variables que propone el autor Porter que son la rivalidad en la industria, poder de los proveedores, poder de los compradores, nuevos entrantes y productos sustitutos. Fuente: Elaboración propia.

#### Tabla 4: Matriz FODA de "CEPROAA". (Elección de la estrategia)

	FORTALEZAS	DEBILIDADES
OPORTUNIDADES	Estrategia F.O.           ☑         Consolidar la estructura del sistema integr de producción.           ☑         Diseño e implementación de un programa o capacitación para el personal.	gubernamentales o privadas.
AMENAZAS	Estrategia F.A. ☑ Utilizar tecnología que permita mejorar eficiencia de la producción y mercadeo. ☑ Lograr la comercialización de los producto para tener participación en el mercador regional.	mercadotecnia para encontrar clientes y proveedores potenciales.

En esta tabla se muestran las estrategias generadas del análisis interno, externo, político, económico, social, tecnológico y ambiental, así como las variables propuestas por el autor Porter como la rivalidad en la industria, poder de los proveedores, poder de los compradores, nuevos entrantes y productos sustituto, dando como resultado la elección de la estrategia a seguir. Fuente: Elaboración propia.

#### Figura 2: Cadena de valor de "CEPROAA".

PR	OVEEDOR		CO	MPRA	ALIMA	CEN	PROD	CIO		INTA	7	CLIENTES	/
•	Buscar	al	۰.	Petición	de	•	Ingreso	•	Cultivo	de	•	Recepción de	Búsqueda de
	mejor			compra.			de		los pece	es y		órdenes de	clientes potenciales.
	proveedor	de	۰.	Requisici	ón		materia		hortaliza	S		venta.	Contacto con el
	productos			de compi	ra.		prima.		en	el	•	Información	cliente.
	mediante		۰.	Autorizad	ción	•	Control de		sistema			de productos	Anotarlo en la
	cotizacione	sу		de compi	ra.		productos		integral	de	•	Elaboración	relación de clientes.
	presupuest	os.	•	Pago	de				producc	ón.		de cotización	Venta de producto.
•	Solicitar	al		mercanci	ía.	•	Salida de					y presupuesto	Distribución del
	proveedor	el	•	Recepció	n de		productos					para clientes.	producto.
	, producto.			producto	s.							•	•
	(Entradas)												(Salidas)

En esta figura se muestra de manera gráfica la cadena de valor, siendo el proceso más importante para la operación del Centro de Producción Acua-Agrícola, por medio de las entradas que sería el proveedor, la compra, almacén, producción y las salidas representadas por las ventas y clientes. Fuente: Elaboración propia.

# Tabla 5: Balanced Scorecard de "CEPROAA".

		OBJETIVOS				
☑ ( ☑ I	talezas y Oportunidades (F.O.). Consolidar la estructura del sistema integral de producción. Diseño e implementación de un programa de capacitación bara el personal.	1) 2) 3)	Crear la estructura organizacional del proyecto. Realizar un análisis interno y externo del proyecto para establecer objetivos. Difundir la filosofía que persigue el Centro entre sus colaboradores.			
Fort	alezas v Amenazas (F.A.).					
☑ ( p ☑ I p <u>Debi</u> ☑	<ul> <li>Jilizar tecnología que permita mejorar la eficiencia de la producción y mercadeo.</li> <li>Lograr la comercialización de los productos para tener participación en el mercado regional.</li> <li>Ilidades y Oportunidades (D.O.).</li> <li>Obtener financiamiento por parte de instituciones gubernamentales o privadas.</li> <li>Diseñar e implementar un Plan estratégico del Centro.</li> </ul>	1) 2) 3) 1) 2) 3)	Desarrollar tecnología para el proceso del manejo de los cultivos. Automatización del proceso productivo de CEPROAA. Dar a conocer el Centro mediante la tecnología con las redes sociales y una página Web. Gestionar eficientemente recursos para la operación del Centro. Administrar eficientemente los subsidios y financiamientos que se otorguen al proyecto. Contar a mediano plazo con ingresos propios para la operación de			
		- /	CEPROAA.			
<u>Debi</u>	ilidades y Amenazas (D.A.).					
	Diseñar e implementar un programa de mercadotecnia para encontrar clientes y proveedores potenciales.	1)	Posicionar nuestros productos y servicios en la región mediante su venta			
	Contribuir al autoempleo en la región mediante la implementación del sistema en los hogares. Vender el proyecto a grandes productores de la región.	2)	Ofrecer el proyecto a la ciudadanía en general como una opción de negocio.			

En esta tabla se muestran las estrategias generadas del análisis interno, externo del Centro de Producción Acua-Agrícola, generando los objetivos a seguir para implementar una planeación estratégica que ayude de manera integral a consolidar la estructura y operación del mismo. Fuente: Elaboración propia.

# Tabla 6: Tablero de control del "CEPROAA".

PERSPECTIVA	A OBJETIVO	INDICADORES		ТА		NCIA	C RESPONSABLE	INICIATIVAS
MISIÓN VISIÓN	Integrar el cultivo de manera hidropónica la actividad acuícola y hortícola, empleando un	Crear la estructura organizacional del proyecto en un 80%.	20	80%	20%	Anual	Coordinador general	Elaborar manuales de operación, de la estructura
VALORES	sistema de recirculación de agua entre los habitantes de la región				20%	Anual	Supervisor del proyecto	organizacional.
	del Sur del Estado de Sonora. Ser líder en la implementación de los sistemas de cultivo hidropónico, integrando la actividad acuícola y hortícola para la producción y comercialización de productos orgánicos.	2013. Implementación del proyecto en la comunidad establecido, en 6 meses como una opción de negocio.		6 mese s	3 meses	Anual	Coordinador general	<ul> <li>Realizar medidas que coadyuven a la organización y administración del proyecto por parte del equipo y de los dirigentes de la UES.</li> <li>Informar y capacitar a la comunidad interesada en llevar a cabo el proyecto.</li> </ul>
FINANCIERA	Gestionar eficientemente los recursos asignados.	Obtener el 100% de los recursos solicitados en tiempo y forma.	0%	90%	10%	Anual	Rector	<ul> <li>Dar un servicio de seguimiento por parte de los integrantes del proyecto de la</li> <li>Solicitar subsidios de gobierno y</li> </ul>
FIVALCERA	Administrar eficientemente los	Elaborar reportes mensuales de ingresos y egresos para control y análisis. Generar ingresos propios a mediano plazo.	0%	80%	20%	Mensual	Coordinador general	buscar alternativas de créditos a PYMES en el sector bancario.
	Contar a mediano plazo con ingresos propios para las operaciones CEPROAA.		0%	80%	20%	Mensual	Supervisor del proyecto	Análisis de los reportes de ingresos para toma de decisiones.
								Aplicar los recursos obtenidos a las operaciones del Centro.

CLIENTE Y MERCADO	Posicionar los productos y servicios en la región.	s Incremento de la producción en un 100% anual.	0% 90%	20%	Anual	Coordinador general	Ø	Realizar encuestas sobre la influencia y consumo de los
PROCESOS INTERNOS	Ofrecer el proyecto a la ciudadanía en general Crear la estructura organizacional del proyecto. Realizar un análisis interno y externo del proyecto para establecer objetivos.	Contar con una base de datos de clientes y proveedores potenciales. Evaluación de las funciones operativas del proyecto. Evaluación y análisis de los objetivos establecidos. Que los integrantes del proyecto conozcan los planes del Centro.	0% 90% 0% 90% 0% 80%	10% 20%	Mensual Anual Anual Anual	Supervisor del proyecto Coordinador general Coordinador general y colaboradores Coordinador		productos para la implementación del programa de Brindar capacitación al personal que opera los procesos para la eficiencia de los recursos. Realizar un taller
	objetivos. Difundir la filosofía que persigue el Centro entre sus colaboradores.		%			general y colaboradores		Realizar un taller con los líderes del proyecto y sus colaboradores para establecer metas y objetivos a futuro. Dar a conocer a los integrantes del proyecto el objetivo del mismo.
APRENDIZAJ E E INNOVACIÓN	Desarrollar tecnología para el control de los cultivos. Automatización del proceso productivo. Darse a conocer mediante la tecnología con las redes sociales y una página Web.	Desarrollo de proyectos de desarrollo de tecnología para CEPROAA en un año. Autorización de presupuesto para la implementación de los proyectos tecnológicos. Control eficiente de la tecnología aplicada.	0%	10%	Anual Anual Anual	Coordinador general Rector, Coordinador, supervisor y colaboradores Colaboradores	Ŋ	Implementar la tecnología desarrollada por parte de los integrantes del proyecto. Llevar a cabo la automatización de los procesos productivos y el monitoreo de la calidad del agua.
							Ø	Realizar una página Web, una cuenta de Faceboock y Twitter para aprovechar la red mundial de comunicaciones.

En esta tabla se describe un tablero de control o Balanced Scorecard, que incluye un plan estratégico e indica los resultados de las acciones que se han tomado, y se complementan las medidas financieras con las medidas operacionales en satisfacción del cliente, procesos internos, y las innovaciones de la organización, así como la mejora de actividades propuestas que son los que dirigen la actuación futura. Elaboración propia.

# CONCLUSIONES

A partir de este modelo de Planeación estratégica fue posible analizar el Centro de Producción Acua-Agrícola (CEPROAA), en forma general tanto sus aspectos internos como externos, identificando oportunidades y amenazas a las que el centro se encuentra expuesto. Así mismo, se analizaron las fortalezas y debilidades con las que actualmente cuenta, ya que también fueron parte esencial para determinar las estrategias planeadas. Este estudio le aporta al Centro, una manera práctica de identificar las debilidades, aprovechar al máximo sus oportunidades; así como explotar sus fortalezas y minimizar las amenazas; con la utilización de esta información, les permite crear las estrategias operativas y funcionales requeridas para consolidarse a futuro como una organización líder en la comercialización de productos marinos y hortícolas en el país. Por medio de la planeación estratégica utilizada como herramienta fundamental para el logro de los objetivos de la empresa, permitiéndole a ésta ubicar su mercado, conocer los principales competidores y creando cursos de acción para cumplir con las metas establecidas, se tiene como resultado en la investigación del proyecto realizado en el Centro, una propuesta de la misión, visión, valores, Organigrama y Plan estratégico. Lo anterior fue aceptado por los integrantes del Centro, lo que avudará a que todos los integrantes laboren bajo el mismo objetivo para lograr una mayor productividad y poder iniciar operaciones formales en un corto plazo, ya que hoy en día se llevan actividades de investigación.

Para lograr el funcionamiento de una estrategia, la organización necesita adoptarla estructura correcta y llevar a cabo una planeación eficiente para realizar las funciones de la misión, realizando trabajo en equipo, para que los integrantes del proyecto, actuales y futuros mejoren su toma de decisiones y el esfuerzo en conjunto. Con lo antes mencionado se concluye, que si es factible la aplicación de un Plan Estratégico en el Centro de Producción Acua-Agrícola (CEPROAA), debido a que ayudará a tener una eficiente planeación, organización y control de las actividades y estrategias establecidas en el tablero de control propuesto en este proyecto.

#### Recomendaciones

- ☑ Se recomienda a los integrantes del CEPROAA, dar seguimiento a las fortalezas, aprovechando las oportunidades para combatir las debilidades y amenazas que puedan afectar a este proyecto, por otro lado, las estrategias expuestas en el tablero de control, son de gran importancia implementarlas para consolidar la estructura organizacional del Centro.
- ☑ También se considera importante buscar financiamiento y apoyo con instituciones gubernamentales para invertir en infraestructura, equipo e insumos, que ayuden a consolidar a la organización.
- ☑ Otra recomendación es llevar a cabo un Plan de Mercadotecnia que permita dar a conocer y posicionar a la empresa en el mercado, lo cual impacte en el incremento de las ventas.
- ☑ De igual manera se recomienda, llevar a cabo un análisis para determinar la viabilidad financiera del Centro de Producción Acua-Agrícola. Así mismo, la información obtenida será facilitada a personas que estén interesadas en el desarrollo de futuras investigaciones que apoyen a mejorar el desempeño del CEPROAA.
- Para finalizar, se recomienda de manera general aplicar el plan estratégico en su totalidad, ya que les facilitara el desempeño y establecería responsabilidades de cada uno de los miembros del Centro, pero lo más importante que será una pieza clave para iniciar operaciones en un corto plazo.

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# METODOLOGÍA DE FLUJO DE CONOCIMIENTO APLICADA AL PROCESO DE ACREDITACIÓN DE PROGRAMAS EDUCATIVOS (SEGUNDA FASE)

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# RESUMEN

El objetivo del presente trabajo consistió en aplicar la segunda fase de la metodología de flujos de conocimiento, propuesta por el Dr. Oscar Mario Rodríguez Elías, al proceso de acreditación de programas educativos de la Universidad Estatal de Sonora, teniendo como marco de referencia el documento de autoevaluación del Consejo de Acreditación de la Enseñanza de la Contaduría y Administración, A.C. y la experiencia de los responsables de integrar las carpetas de evidencias. Para desarrollar la segunda fase relacionada con el análisis de flujos de conocimiento, compuesta de cuatro etapas, se seleccionó de la primera fase, el modelado de procesos de la categoría de admisión de la variable estudiantes. Como uno de los resultados, se puede mencionar que la metodología permitió identificar con claridad al principal actor del proceso, que para este caso específico, fue el jefe de carrera quien fue el responsable de revisar, retroalimentar e integrar las evidencias en la carpeta de autoevaluación. No obstante que la metodología fue propuesta para el diseño de sistemas de administración de conocimiento, enfocado al mantenimiento de software, fue posible aplicarla en su segunda fase al proceso de acreditación.

**PALABRAS CLAVE**. Flujos de conocimiento, acreditación de programas educativos, sistemas de administración de conocimiento.

# KNOWLEDGE FLOW METHODOLOGY APPLIED TO THE ACCREDITATION OF EDUCATIONAL PROGRAMS (SECOND PHASE)

# ABSTRAC

The objective of this study was to carry out the second phase of the methodology of knowledge flows analysis, proposed by Dr. Oscar Elias Mario Rodriguez, to the process of accreditation of educational programs at the Universidad Estatal de Sonora. We take as reference the self-assessment document of the Consejo de Acreditación de la Enseñanza de la Contaduría y Administración, A.C and the experience of those responsible for integrating evidence folders. The second phase is related to the analysis of knowledge flows. As a result we conclude that the methodology clearly helped us identify the main actors in the process, which, in this specific case, was the head of career, who was responsible to review, give feedback and integrate the evidence on self-assessment folder. Although the methodology was proposed for the design of knowledge management systems, focused on software maintenance, it was possible to implement the second phase in the accreditation process.

**JEL**: I23

**KEYWORDS:** Knowledge flows, accreditation of educational programs, knowledge management systems.

#### INTRODUCCIÓN

Para asegurar la calidad de los programas educativos (PE) y rendir cuentas claras a la sociedad, las Instituciones de Educación Superior (IES) en México, han participado desde 1991 en procesos de evaluación diagnóstica a través de los Comités Interinstitucionales para la Evaluación de la Educación Superior (CIEES) y a partir de año 2000 en procesos de acreditación a través del Consejo para la Acreditación de la Educación Superior, A. C. (COPAES), (COPAES, 2012).

El Centro de Estudios Superiores del Estado de Sonora (CESUES), hoy Universidad Estatal de Sonora (UES) no ajeno a esta situación, inicia a mediados del año 2004 sus procesos de evaluación, con la visita del Comité de Ciencias Agropecuarias para la carrera de Licenciado en Acuacultura (LA) y el Comité de Ciencias Sociales y Administrativas para la carrera de Licenciando en Sistemas Computacionales Administrativos (LSCA), alcanzando en ambos programas, un nivel dos. Posteriormente las licenciaturas se someten al proceso de acreditación, logrando su reconocimiento como programas de buena calidad en 2006 y 2007 por la Asociación Nacional de Profesionales del Mar (ANPROMAR) para LA y por el Consejo de Acreditación de la Enseñanza de la Contaduría y Administración, A.C.

(CACECA) para LSCA. Sin embargo, tanto en el proceso de evaluación, como en el de acreditación, se presentaron diversas dificultades entre las que se pueden destacar la insuficiencia de evidencias para fundamentar los criterios, desubicación de documentos (normatividad, convocatorias, ponencias, oficios), poca claridad sobre el responsable inmediato de generar la información, falta de homogeneización de los formatos utilizados para el registro de actividades y departamentos sin sistemas de información o con limitaciones en sus aplicaciones, entre otros.

Para atender lo anterior se diseñó una propuesta de un sistema basado en conocimiento de indicadores académicos, no obstante y como resultado de un proyecto de investigación conjunto entre el UES y el Instituto Tecnológico de Hermosillo (ITH), y con base en la problemática presentada, se consideró oportuno fortalecer la propuesta inicial con un sustento en la metodología de Identificación de Flujos de Conocimiento (KoFI) por sus siglas en inglés.Aun cuando la metodología KoFI de Rodríguez (2007) se orienta a la obtención de información que apoye el diseño de sistemas de AC que dan soporte al flujo del conocimiento en el área de mantenimiento de software, su idea es que ésta se generalice a la solución de problemas específicos en áreas diferentes organizaciones, por lo cual el aporte del presente trabajo es aplicarla en su fase inicial en los procesos de acreditación de los programas educativos del UES.

El resto de este documento está estructurado de la siguiente manera: en primer lugar la sección de revisión literaria muestra información sobre la AC, el modelo de creación del conocimiento, el del ciclo del conocimiento y proceso de administración del conocimiento. En la sección de metodología se realiza una descripción general de la metodología KoFI y una específica de la segunda fase de la metodología que corresponde al análisis del flujo de conocimiento. En la sección de resultados se encuentran identificadas las cuatro etapas de la segunda fase que son: identificación de fuentes de conocimiento, identificación de tipos de conocimiento, identificación de flujos de conocimiento, identificación de la segunda fase que son: la sección de conocimiento e identificación de problemas para la categoría de admisión de la variable estudiantes. En la sección de conclusiones se establecen éstas, las limitaciones del estudio, la contribución al cuerpo de la literatura e ideas para investigación futura. En la sección de referencias se enumeran los artículos, libros y documentos utilizados en la presente investigación y en la biografía se describe en forma breve el perfil de cada autor.

# **REVISIÓN LITERARIA**

En la actualidad no existe un consenso sobre el concepto de Administración del Conocimiento (AC) (Serenko & Bontis, 2004). No obstante Dalkir (2005) identifica tres enfoques principales: el primero considerado a partir de las actividades del negocio, el segundo definido a través de la ciencia del conocimiento y el tercero desde las tecnologías y procesos, como un conjunto de actividades y sistemas tecnológicos para facilitar el flujo del conocimiento hacia las personas en el momento que lo requieran.

Partiendo del tercer enfoque la AC puede ser definida como una disciplina sistemática y un conjunto de propuestas que apoyan en el crecimiento y flujo del conocimiento (Rao, 2005). Debido a que esta perspectiva atiende a la aplicación de la metodología KoFI, se entenderá por AC a la disciplina que provee de métodos, técnicas y herramientas encaminadas a apoyar las actividades necesarias para facilitar el flujo del conocimiento hacia donde se requiere, con el fin de realizar de la mejor manera el trabajo para completar procesos específicos en una organización (Rodríguez, 2007).

Por lo anterior y para darle sentido a esta definición será necesario identificar ¿qué es conocimiento?, ¿qué constituye el flujo del conocimiento? y ¿cuáles son las actividades involucradas en el flujo del conocimiento que forman parte del proceso de la administración del conocimiento?Davenport y Prusak (2000) consideran que para entender el concepto de conocimiento es necesario entender que son los datos y la información. Los datos, son definidos como hechos simples que pueden agruparse para crear información, pero que por sí solos carecen de significado. La información por su parte es considerada como un conjunto de datos que tienen un significado y su objetivo es informar a quien los recibe, con el fin de tener un efecto en su juicio o en la forma en que percibe algo.

El conocimiento es concebido como una mezcla de experiencias, valores, información contextual y pericia que provee de un marco para evaluar e incorporar nuevas experiencias e información. Esto se origina y es aplicado en la mente de quienes conocen. En las organizaciones, este se da no sólo en documentos o repositorios, sino también en rutinas, procesos, prácticas o normas de la organización. No todo el conocimiento puede ser fácilmente representado como información o datos, así como el que existe en forma de documentos o bases de datos, existe otro que se encuentra en la mente de las personas. El primero que puede ser expresado de manera formal, fácilmente comunicado es denominado como conocimiento explícito, mientras que el tácito es aquel conocimiento personal utilizado para realizar las tareas y para obtener un entendimiento del medio ambiente. (Nonaka & Takeuchi, 1995).

Organizacionalmente, la importancia del conocimiento reside en su aplicación (Alavi & Tiwana, 2002), por lo que el principal objetivo de una estrategia o sistema de AC debe enfocarse en facilitar y mejorar el flujo del conocimiento (Borghoff & Pareschi, 1998). Para explicarlo existen varios modelos propuestos y se identifican principalmente tres enfoques: el primero que atiende a la forma en que el conocimiento transita entre sus estados tácito y explicito, conocido como el proceso de creación de conocimiento de Nonaka y Takeuchi (1995); el segundo que considera al conocimiento como un recurso que da la capacidad de utilizar información con un fin práctico como la toma de decisiones, denominado ciclo del conocimiento de Choo (1999); y el tercero que se refiere a las actividades que componen el proceso de AC identificado como proceso de administración del conocimiento del cual existen una amplia variedad de modelos, (Dalkir, 2005; Holsapple & Joshi, 1999; Nissen, 2002; Qureshi et. al., 2004), tabla 1.

Peachey (2005) basado en el modelo de AC Alavi y Leidner (2001), ha identificado que el principal enfoque de la AC está relacionado con los sistemas de información y está dirigido hacia la transferencia de conocimiento en cuanto a: almacenamiento, recuperación, aplicación y la creación de conocimiento.

Modelo	Etapa 1	Etapa 2	Etapa 3	Etapa 4	Etapa 5	Etapa 6	Etapa 7
Wiig, 1993	Construir	Capturar	Transferir	Aplicar			
McElroy, 2000	Producir	Integrar	Difundir	Aplicar			
Alavi y Leidner, 2001	Crear	Almacenar/	Transferir	Aplicar			
		Recuperar					
Dalkir, 2005	Capturar/	Valorar	Compartir/	Contextualizar	Adquirir/	Actualizar	
	Crear		Diseminar		Aplicar		
Ward y Aurum, 2004	Crear	Adquirir	Identificar	Adaptar	Organizar	Distribuir	Aplicar
Rodríguez, 2007	Crear/	Externalizar	Almacenar	Transferir/	Internalizar		Aplicar
-	Adquirir			Compartir	Recuperar	Interpretar/	-

Tabla 1: Modelos del	Proceso Administraciór	del Conocimiento
14014 11 11040100 401		

La tabla muestra varias propuestas de modelos para el proceso de AC, en ella se observan las diferencias con respecto a las etapas que proponen cada uno de los autores; también se incluye el modelo de Rodríguez (2007) que es el que se utiliza para el presente trabajo.

# METODOLOGÍA

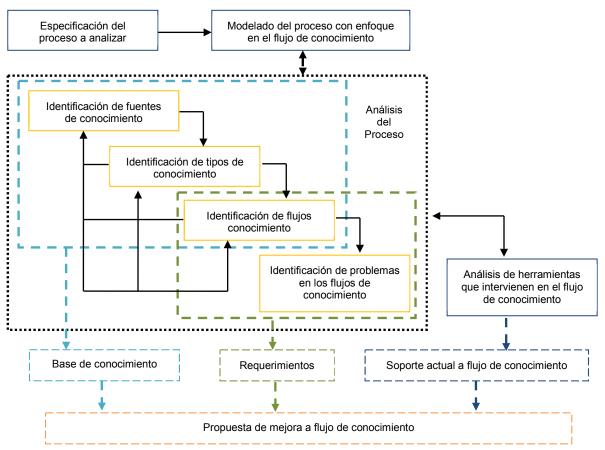
A continuación se realiza una breve descripción de la metodología KoFI, propuesta por Rodríguez (2007), que se aplicó al proceso de acreditación de programas educativos en su segunda fase, haciendo énfasis en esta última, la cual se presenta como una guía para identificar y entender los flujos de conocimiento en procesos organizacionales, utilizando un enfoque de ingeniería de procesos con orientación hacia la obtención de información, que apoye el diseño de sistemas de AC que dan soporte al flujo del conocimiento.

#### Fases de la Metodología KoFI

La metodología KoFI, se descompone en tres fases principales las cuales son descritas a continuación y son observables en la figura 1.

- Modelado del proceso con enfoque en el flujo del conocimiento. La representación gráfica es una de las principales técnicas para el modelado de procesos. KoFI propone dos enfoques, uno con la adaptación de la técnica de Gráfica Rica (Checkland & Scholes, 1999; Monk & Howard, 1998), para la primera etapa del modelado que identifica los procesos de manera general y el otro mediante una adaptación del Metamodelo para Procesos de Ingeniería de Software (SPEM) por sus siglas en inglés (OMG, 2002), para la segunda etapa de modelado y en el análisis detallado del proceso.
- 2. Análisis del flujo de conocimiento. Se centra principalmente en los flujos de conocimiento siguiendo un proceso compuesto de cuatro etapas de identificación de: fuentes de conocimiento, tipos de conocimiento, flujos de conocimiento y problemas en el flujo de conocimiento.
- 3. Análisis de herramientas de soporte al flujo del conocimiento. La fase final de la metodología consiste en analizar el papel que juegan como habilitadoras del flujo del conocimiento, las herramientas que apoyan los procesos de trabajo, para lo cual se definió un Marco de Trabajo para el Análisis de Herramientas de AC, denominado (MAHAC), a partir de la revisión literaria de varios autores Borghoff y Pareschi (1998) y Alavi y Leidner (2001), por destacar algunos. MAHAC, integra una serie de pasos a seguir para identificar las características de las herramientas a estudiar, desde el punto de vista de su aporte al flujo del conocimiento durante el desarrollo del proceso, estos son: el dominio de aplicación de las herramientas, la estructura y formato del conocimiento manejado, las actividades, servicios o procesos de AC soportados y los aspectos técnicos que podrían ser considerados (Rodriguez, et.al., 2008).

Filtrar



#### Figura 1: Metodología KoFI propuesta por Rodríguez (2007)

La presente figura muestra una vista general de la metodología KoFI, utilizada en el proceso de acreditación de programas educativos de la UES, Unidad Académica Navojoa, destacando con líneas punteadas negras las cuatro etapas de la segunda fase.

# Fases Dos De La Metodología Kofi

A continuación se describe la etapa tres, denominada identificación de flujos de conocimiento, la cual fue seleccionada por ser la más significativa de las cuatro etapas que integran la fase dos de la metodología KoFI.

# Etapa Tres: Identificación De Flujos

La tercera etapa de la fase de análisis de la metodología KoFI se centra en identificar la manera en que los tipos y fuentes de conocimiento interactúan dentro de los distintos procesos y actividades que debe realizar y decisiones que debe tomar el grupo u organización que se estudia. Esto se hace con el fin de identificar el conocimiento requerido por dichas actividades, procesos o decisiones, así como las fuentes y mecanismos de que se valen los encargados de las mismas para obtener, guardar y compartir ese conocimiento.Para la identificación de los flujos de conocimiento, se identifica primero el conocimiento que es aplicado o requerido durante la realización de actividades, toma de decisiones, etc. Se identifican las fuentes donde este conocimiento puede ser obtenido, así como los mecanismos utilizados para localizar y recuperar esas fuentes. También, se identifica el conocimiento generado durante estas actividades o toma de decisiones, si éste conocimiento es almacenado en algún lugar, y de ser así, qué mecanismos se utilizan para estructurarlo, representarlo y almacenarlo. Para lo anterior se propone el uso

- 1. Actores u Objetos: están ubicados en la parte superior del diagrama de secuencia y representan personas, sistemas o algún otro objeto que intervienen en la interacción.
- 2. Línea de Vida: se representa por una línea vertical punteada, Es una línea que desciende de un actor u objeto y muestra la duración de la vida de un objeto en el diagrama.
- 3. Cajas de Activación: es un rectángulo que desciende sobre la línea de vida. Indica el tiempo en que un actor u objeto interviene en el proceso (Kimmel, 2007).
- 4. Mensajes: cada mensaje entre objetos se representa con una expresión de mensaje sobre una línea con punta de flecha entre los objetos. El orden en el tiempo se organiza de arriba abajo.
- 5. Representación de retornos: un diagrama de secuencia podría mostrar el retorno de un mensaje con una línea punteada con la punta de fecha abierta, al final de una caja de activación.
- 6. Mensajes a "self" o "this": se puede representar un mensaje que se envía un objeto a él mismo utilizando una caja de activación anidada (Larman, 2003).

Figura 2: Elementos de un Diagrama de Secuencia



# RESULTADOS

La metodología KoFI, propuesta por Rodríguez (2007) y descrita en el apartado anterior fue aplicada al proceso de acreditación de programas educativos de la UES, Unidad Académica Navojoa, en su segunda fase correspondiente al análisis del flujo de conocimiento, que se centra principalmente en los flujos de conocimiento siguiendo un proceso compuesto de cuatro etapas de identificación de: fuentes de conocimiento, tipos de conocimiento, flujos de conocimiento y problemas en el flujo de conocimiento.

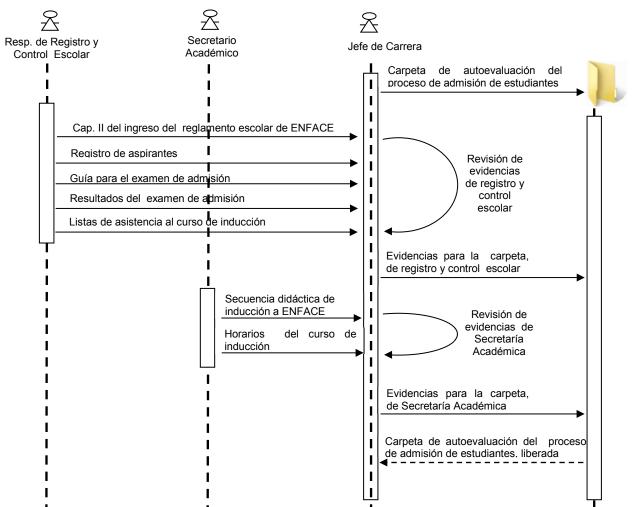
Para poder avanzar a la segunda fase, fueron fundamentales los modelados de procesos con enfoque en flujos de conocimiento desarrollados en la fase inicial, los cuales se representaron a través de la adaptación de la gráfica rica propuesta por Rodríguez (2007).Para el presente trabajo seleccionó únicamente el modelado de admisión de estudiantes como base para el desarrollo de las cuatro etapas de la segunda fase de la metodología KoFI, no obstante sólo se presenta la tercera etapa, que es la más significativa, correspondiente a la fase de identificación de los flujos de conocimiento.

# Etapa Tres: Identificación De Flujos De Conocimiento

Para identificar la forma en que los tipos y fuentes de conocimiento interactúan dentro de los distintos procesos y actividades a realizar y las decisiones que tiene que tomar el grupo de estudio, se tomó como referencia el modelado procesos con enfoque en flujos de conocimiento de admisión de estudiantes desarrollado en la fase inicial y se identificó en primera instancia el conocimiento que es aplicado o requerido durante el desarrollo de las actividades y/o toma de decisiones; se identificaron las fuentes de donde ésta puede ser obtenida, los actores y si el conocimiento requería ser almacenado en algún lugar. Para representar lo anterior la metodología se utilizó un diagrama de secuencia, según se muestra en la figura 3; en la cual se puede identificar con claridad cómo el jefe de carrera tiene un rol fundamental, ya

que es quien revisa, retroalimenta e integra las evidencias en la carpeta de autoevaluación del proceso correspondiente.

Figura 3: Diagrama de Secuencia Aplicado al Proceso de Admisión de Estudiantes



En la figura anterior se representa el flujo de conocimiento que se genera dentro del proceso de admisión de estudiante, identificando a los actores principales, las fuentes de información, los flujos y el lugar de almacenamiento del conocimiento, en una acreditación de programas educativos.

# CONCLUSIONES

- 1. La principal aportación de este trabajo fue aplicar la segunda fase de la metodología KoFI al proceso de acreditación de programas educativos de la UES, Unidad Académica Navojoa, consistente en el análisis de flujos de conocimiento; no obstante que esta fue desarrollada para el diseño de sistemas de AC con enfoque al mantenimiento de software.
- 2. La principal limitación encontrada por el grupo de trabajo en el desarrollo de este proyecto sigue siendo la falta de experiencia en la aplicación de la metodología, así como la escaza información que hay de casos similares.
- 3. La metodología KoFI provee un conjunto de metamodelos y formatos propios, así como también incorpora otros, tales como el diagrama de secuencia, que en conjunto facilitan el análisis detallado

de los flujos de conocimiento relacionados con los diferentes procesos, los cuales son la base para el desarrollo de la etapa tres correspondiente al análisis de herramientas de soporte al flujo del conocimiento.

4. Al concluir el desarrollo de la metodología en la UES, se espera que el marco metodológico que proporciona KoFI, pueda servir para apoyar los procesos de acreditación de otras IES, sustentados en la experiencia de aseguramiento de la calidad del UES y puedan desde el enfoque de flujos de conocimiento, proponer o mejorar sus estrategias o sistemas de AC.

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# INFLUENCIA DEL LIDERAZGO SOBRE EL CLIMA ORGANIZACIONAL EN PYMES; CASO CATERING GOURMET DE DURANGO, MÉXICO

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# RESUMEN

Para las Pequeñas y Medianas Empresas es necesario conocer el ambiente que perciben los trabajadores, con el fin de mejorar su administración y evitar enfrentarse a algunos de los problemas que las hacen vulnerables, como los altos índices de rotación de personal entre otros, ya que son el motor de la economía de México, y la productividad de las mismas depende directamente, en la mayoría de los casos, del personal que en ellas labora. Para el desarrollo de esta investigación se utilizó un inventario para medir clima organizacional, instrumento diseñado por Rodríguez, Álvarez, Sosa, De vos, Bonet y Van der Stuyft (2010), el cual nos permitió conocer la percepción de los empleados en cuanto al clima que ellos consideran que existe en la organización haciendo énfasis en el liderazgo. El tipo de estudio que se realizó es cuantitativo y de enfoque descriptivo, de tipo no experimental de corte transversal, aplicado en el total de la población de la organización Los resultados demostraron que la mayoría de las dimensiones del clima organizacional se ven afectadas por la percepción de un mal liderazgo especialmente la dimensión de la motivación del empleado.

PALABRAS CLAVE: Clima organizacional, liderazgo, pymes.

# LIDERSHIP STYLE AND ITS IMPACT ON SMES ORGANIZATIONAL CLIMA: CASE OF GOURMET CATERING IN DURANGO, MEXICO

# ABSTRACT

For Small and Medium Enterprises is necessary to know the environment perceived by workers to improve their management and avoid facing some of the problems that make them vulnerable, such as high turnover rates among others, as they are the engine of the economy of Mexico, and their productivity is directly dependent, in most cases, staff in these works. For the development of this research was used to measure organizational climate inventory, instrument designed by Rodriguez, Alvarez, Sosa, de Vos and Van der Stuyft Bonet (2010), which allowed us to study the perceptions of employees in climate that they believe exists in the organization with an emphasis on leadership. The type of study conducted approach is quantitative and descriptive, cross-sectional nonexperimental, applied to the total population of the organization The results showed that most of the dimensions of organizational climate are affected by perception of poor leadership especially the dimension of employee motivation.

KEYWORDS: Organizational climate, leadership, SMEs.

**JEL:** M12

# INTRODUCCIÓN

Catering Gourmet de Durango, S.A. de C.V. es una organización dedicada al servicio de alimentos, proporcionados ya sea en restaurantes, comedores industriales o en banquetes para eventos, actualmente

cuenta con 60 trabajadores y 5 áreas de trabajo, en las que se realizan las actividades principales de la organización. Siendo una Pequeña y Mediana Empresa (se usará PyME) ha tenido que enfrentarse a los problemas de administración que las empresas de este tipo tienen desde su establecimiento, el hecho que de que sean los dueños quienes administren sin tener las bases necesarias, que el personal que se ocupa no tenga las características que requieren los puestos o que la economía del negocio no permita un rápido crecimiento, son solo algunos de estos problemas.

Mencionado lo anterior, la organización sobre la que se está realizando esta investigación, se enfrenta a un problema grave, desde su inicio, ha pasado por diversas personas en su administración, que implica diferentes estilos de liderazgo y por ende un clima organizacional cambiante, durante este proceso se ha considerado que la percepción de los empleados sobre el clima organizacional está directamente ligado con la persona que se encuentra como su supervisor directo. El problema podría radicar en que la gerencia ha optado en la mayoría de los casos por solucionar los problemas originados por la percepción de "mal liderazgo" despidiendo al personal que se oponga a este liderazgo, o bien, que lo aplique, sin darle solución de fondo a los métodos que se están empleando. Esta decisión de la gerencia provoca que haya una rotación fuerte de personal, sin embargo no es igual para todas las áreas de la empresa, por lo que el objetivo de esta investigación es determinar que estilo de liderazgo es el que mejor trabaja dentro de la organización, para poder capacitar a quienes tengan personal a su cargo para hacer del clima organizacional una motivante del trabajo. Como menciona Robbins (1991), "la sociedad influye sobre el clima organizacional, que se modificará a través del tiempo como resultado de la mayor cantidad de conocimientos, la diversidad de la fuerza de trabajo, los adelantos tecnológicos, la legislación laboral, las normas gubernamentales y el crecimiento de las organizaciones", por lo que los elementos que influyen en el clima organizacional deben ir evolucionando junto con la sociedad.

#### Objetivo General

- Conocer si el estilo de liderazgo influye sobre el clima organizacional en Catering Gourmet de Durango, S.A. de C.V.

# **Objetivos Específicos**

- Determinar los estilos de liderazgo percibido por los trabajadores dentro de la organización Catering Gourmet de Durango, S.A. de C.V.
- Conocer el clima organizacional percibido por los empleados de Catering Gourmet de Durango, S.A. de C.V.
- Proponer un estilo de liderazgo para la organización que mejore la percepción del clima organizacional de los trabajadores en Catering Gourmet de Durango, S.A. de C.V.

# Pregunta De Investigación

¿De qué forma influye el liderazgo en el clima organizacional de Catering Gourmet de Durango, S.A. de C.V.?

# <u>Hipótesis</u>

El estilo de liderazgo influye en la percepción que tienen los trabajadores del clima organizacional en Catering Gourmet de Durango, S.A. de C.V.

#### Alcances

Para determinar los alcances de la investigación para lograr los objetivos, se consideran el tamaño de la organización, el número de trabajadores y la importancia de la percepción de los empleados en cada área de la empresa. De acuerdo a lo anterior, y tomando en cuenta que la organización lleva a cabo sus actividades comerciales en diversas instalaciones, completamente separadas, para los efectos de esta investigación se van a considerar a todas las personas que forman parte de la organización y prestan sus servicios en alguna de las instalaciones parte de la empresa. La organización cuenta con instalaciones que incluyen: dos restaurantes, tres comedores industriales y personal de oficina, contando con 20 trabajadores en el área denominada Gaucho, 9 en Marea, 9 en Parrilla, 11 en Oficina y 11 en Masisa.

#### Limitaciones

La investigación solo se realizará en la empresa "Catering Gourmet de Durango, S.A. de C.V.", en todos los establecimientos donde se llevan a cabo las actividades principales de la organización, por lo que no abarcará al resto de las pequeñas y medianas empresas del sector restaurantero del Estado. Dentro de la organización se considerará como limitante que la investigación no podrá ser realizada con personal que presta sus servicios a la organización, pero que no forman parte de la misma, sino que trabajan por eventos o por temporadas cortas, ya que al no ser personal permanente de la empresa pudiera no tener una percepción objetiva del liderazgo y clima organizacional de la empresa.

# **REVISION LITERARIA**

Las PyMES en el mundo han sido consideradas como regeneradoras económicas en los países, un ejemplo es el que da Barrientos (2008), quien asegura que el potencial de la Unión Europea se debe al apoyo que se otorga a las PyMES, ya que se les considera un importante factor de creación de empleos, lo que permite obtener altos niveles de crecimiento y bienestar social. Las PyMES no solo tienen importancia para las economías nacionales por sus aportaciones a producción, sino porque tienen un alto grado de flexibilidad para adaptarse a los cambios que se vayan presentando con el tiempo, lo que impulsa el desarrollo económico y una mejor distribución de la riqueza. Es importante para lograr que las PyMES se desarrollen, llevar una adecuada administración, la empresa no podrá avanzar por sí misma, si no que necesita de la participación de todos sus integrantes, por lo que es importante conocer las estrategias administrativas y los componentes de la administración, entre los que, se encuentran los que, en este caso, serán en los que se centrará la investigación, los cuales son el clima organizacional y el liderazgo. La administración siempre ha sido ligada a los negocios, y es que es parte importante dentro de la organización, ya que permite coordinar los esfuerzos del conjunto de personas que la integran, permitiendo de esta manera lograr los objetivos de forma eficiente y eficaz.

Hernández (2002) dice que la administración "es la actividad humana encargada de organizar y dirigir el trabajo individual y colectivo efectivo en términos de objetivos predeterminados." Del mismo modo para Koontz y Weihrich (2004) la administración es "el proceso de diseñar y mantener un ambiente en el que los individuos, trabajando en grupos de manera eficiente, alcancen objetivos seleccionados." Una de las razones por las que es importante el estudio tanto del clima organizacional y cada uno de sus componentes, es lo que explican Blake y Mounton (citado por Aviña y Espinosa, 2004) denominada la rejilla administrativa, que está basada en dos polos, el primero es la importancia que da el administrador a la producción y el segundo la importancia que da a las personas. Este método se puede utilizar como un medio para la identificación de los estilos de liderazgo, ya que muestra el cómo se interesa el administrador por la producción o por las personas, Blake y Mounton señalan que hay cuatro estilos extremos dentro de esta rejilla, los cuales determinan el grado de preocupación de los administradores.

#### METODOLOGIA

Para esta investigación, se eligió el paradigma cuantitativo ya que busca las causas y los hechos de los fenómenos sociales, prestando poca atención a estados subjetivos, se puede obtener una medición controlada y penetrante, siempre se mantiene al margen de los datos como si fuera una perspectiva desde fuera. El desarrollo de la investigación será dentro de un método descriptivo de campo, con el que se pretende dar lugar a una propuesta de aplicación de un determinado estilo de liderazgo conveniente para la organización. El alcance que se determinó para esta investigación fueron todas las instalaciones en las que se realizan las actividades principales de la organización, que incluye a 60 trabajadores ubicados en 5 áreas de trabajo, a los cuales se les aplicará el instrumento detallado más adelante. El diseño de la investigación también será de corte transversal, por el hecho de recolectar los datos en un único momento en la población. Los datos serán recolectados en el total de la población de cuestionarios en las diversas áreas de trabajo que comprenden la empresa.

La información recolectada fue procesada por medio del software SPSS 2010, por lo que a los datos se les aplicó un proceso de estadística descriptiva, obteniendo un mejor manejo de los datos y representación de la información. De acuerdo a Rodríguez et. al. (2010) diseñadores del instrumento que se aplicará en esta investigación aseguran que "el instrumento ha sido diseñado, con el debido sustento técnico, después de la revisión de múltiples modelos, hasta llegar a integrarlo en una forma que cada institución pueda adecuarla a su propia realidad e interés de análisis. Para el análisis del clima organizacional por medio de este instrumento, se trabajará con cuatro dimensiones, y el diagnostico se realiza por medio de la interpretación del conjunto de percepciones que tienen los trabajadores sobre estas cuatro variables.

Se utilizarán expresiones, afirmaciones o reflexiones, que serán relacionadas en una hoja de respuestas de acuerdo a la selección que haga el individuo, basándose en lo que a su juicio muestra los atributos de la organización en la que labora. Las respuestas en este caso serán únicamente de verdadero (V) o falso (F), cada categoría está compuesta por cinco preguntas, por lo que cada área a evaluar tendrá veinte preguntas. Para evaluar la puntuación obtenida, se reúnen las hojas de respuesta y se numeran correlativamente; a cada respuesta que coincide con el estándar se le asigna el valor de uno (1). Aquellas que no coinciden tendrán valor cero (0). En la hoja de conteo se van colocando los uno correspondientes a las respuestas que coinciden con la plantilla. Esta matriz contiene en las filas los números del 1 al 80, que son el número de reflexiones del instrumento; y en las columnas, cada casilla (C1,...Cn) representa el número de instrumentos aplicados. Se utilizan tantas columnas como tantos el número de participantes.

En la última columna de la matriz u hoja de conteo, se suma en forma horizontal todos los unos (1) que hubo en las casillas. Al total se le saca una media aritmética. Al final de las operaciones, se obtiene 80 promedios. El resultado siempre será uno (1) o fracción, considerándose adecuado cuando esta media sea de 0,60 o superior. Los promedios obtenidos en estos subconjuntos de respuestas se suman para obtener el valor de cada variable. El resultado de cada categoría será 5 o menos. Teniendo en cuenta que el mayor de los resultados de cada variable es de 5 puntos, se asume como nivel aceptable el valor medio 3. Cuando los valores se encuentran debajo de 3 se interpreta como que el clima no es satisfactorio.Para los efectos de este estudio, las 4 dimensiones sobre las que se trabajará son: liderazgo, motivación, reciprocidad o compromiso y participación

# RESULTADOS

La percepción de los empleados es mayoritariamente positiva sobre la dirección que se ejerce en la empresa, sin embargo existen algunas que son en sentido contrario, suficientes para poner en relieve que aun hay circunstancias que los hacen diferir de la tendencia favorable. Aunque las respuestas negativas

no marcan una tendencia fuerte, el hecho de que se hayan dado implica que existen empleados que nos están del todo conformes c Estímulo de la experiencia en esta categoría que se desprende de la dimensión de liderazgo, se busca la mejora constante con la incorporación de nuevos conocimientos e instrumentos técnicos, buscando siempre el desarrollo de las personas involucradas, la percepción de los empleados se reflejara en los resultados obtenidos en esta dimensión, los que marcan el sentir de los trabajadores en cuanto a los beneficios que obtienen por los conocimientos adquiridos. En lo que se refiere a la participación del "líder" en esta categoría, las respuestas están muy divididas entre los miembros de la organización, mientras algunos sienten que el superior no se mantiene pendiente de la calidad del trabajo, ni de la forma en que se realiza, la otra parte está satisfecha con el trabajo del superior en su área.

Una de las habilidades administrativas es la del trabajo en equipo, en la búsqueda de lograr objetivos comunes, con una participación organizada y un ambiente de apoyo mutuo. En esta dimensión que se desprende de la categoría de liderazgo, la percepción refleja la disposición que tienen los empleados para trabajar en equipo dentro de la organización. Sin embargo hay una parte de la población que siente que aún hay personas dentro de la organización que no trabajan a la par del resto y que solo son unos cuantos los que sacan adelante el trabajo y el logro de los objetivos. No hay organizaciones en las que no se dé el conflicto, las diferencias entre los trabajadores y sus intereses están en permanente competencia, dentro de esta categoría que forma parte de la dimensión de liderazgo, los resultados serán el reflejo del ambiente que generan dichos conflictos y su respuesta ante los mismos. La percepción general es que todos participan en la solución del problema, aunque no sean los responsables o no sientan que les corresponde darle solución, pero la mayoría cree que la participación de los demás en la solución de los conflictos es por ponerse en una posición que le dé una mejor imagen frente a los superiores.

# CONCLUSIONES

De acuerdo a los resultados obtenidos después de lograr los objetivos, podemos confirmar la hipótesis en la que se afirma que el liderazgo crea influencia en la forma en que los trabajadores de Catering Gourmet de Durango, S.A. de C.V. perciben el clima organizacional dentro de la empresa. En este caso, es negativa la forma en que el liderazgo ejerce su influencia, ocasionando un clima organizacional desfavorable para la empresa y que por ende no permite la satisfacción completa de los trabajadores de la institución. Para una futura investigación, se podría considerar el hacer estudio de la influencia que ejerce el liderazgo en la percepción del clima organizacional en el resto de las PyMES del Estado de Durango, con el fin de conocer si en todas las organizaciones que abarcan este sector, se da el mismo fenómeno que se presentó en la organización investigada, es decir, si en todas las organizaciones corresponde un mal liderazgo a una mala percepción del clima organizacional, o bien, si existe un buen liderazgo que corresponda a una buena percepción del clima organizacional.

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# DIAGNÓSTICO DE LA INDUSTRIA DE JAIBA A PARTIR DE UN ESTUDIO DE LAS COMERCIALIZADORAS UBICADAS EN LA REGIÓN COSTERA DE BAHÍA DE KINO, SONORA

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# RESUMEN

La producción de jaiba (Callinectes bellicosus) desde la década de los 80's ha sido una actividad eficiente en la industria pesquera del Estado de Sonora; sin embargo, la falta de implementación de aspectos ambientales ha generado una problemática que ha llevado a que la pescadería se encuentre en su máximo sustentable; es decir no es recomendable incrementar el esfuerzo pesquero actual, por lo que la única vía de crecimiento en este sector, se dará a través de mejores prácticas en sus procesos de producción y comercialización de jaiba. Por ello, este estudio analizó la situación actual de esta Industria en el Estado de Sonora, procediendo a trabajar en varias etapas de diagnóstico; la primera en un estudio de campo donde se investigó la situación operativa de las comercializadoras de jaiba ubicadas en la Región Costera de Bahía de Kino; en materia de capacidad productiva, mercados, generación de empleo, proceso productivo, precios, proveedores y análisis de oferta. Para la obtención de información, se utilizó la entrevista a profundidad de tipo semi-estructurada como herramienta cualitativa; mientras que para el análisis y manejo de la información, se utilizó como marco de referencia, el modelo de las cinco fuerzas competitivas de Porter.

PALABRAS CLAVES: Sustentable, producción, comercialización, jaiba.

# INTRODUCCIÓN

A través del desarrollo de esta ponencia se puede apreciar un cumulo de información referente a la producción y comercialización de la Jaiba en el Estado de Sonora, México, específicamente, información obtenida por medio de una primera etapa de diagnóstico; un trabajo de campo donde se investigó la situación operativa de las comercializadoras de jaiba ubicadas en la Región Costera de Bahía de Kino, Sonora, en materia de capacidad productiva, mercados, generación de empleo, proceso productivo, precios, proveedores y análisis de la oferta. La selección de esta zona costera se justifica, debido principalmente a que en Bahía de Kino, se ubican 6 de las 22 empresas procesadoras de jaiba que existen en todo el Estado, lo que representa el 28% del total de las procesadoras.

De lo anterior, destaca que las empresas productoras cuentan con poder relativo en cuanto a la fijación de precios y que el grado de competencia es moderado. Otro aspecto importante a mencionar es, la disposición y conocimiento de las empresas hacia aspectos ambientales y de sustentabilidad. No obstante, los acuerdos tomados en materia ambiental o el cumplimiento de las normas de esta índole, no corresponde únicamente a ellas como empresas, sino al resto y conjunto de la comunidad, sobre todo a los pescadores de este producto pesquero.

# **REVISIÓN DE LA LITERATURA**

Taxonómicamente las jaibas son animales que pertenecen al phylum Arthopoda, subphylum Crustacea, clase Malacostraca, orden Decapoda, suborden Pieocyemata, infraorden Brachyura y familia Portunidae

(Barnes, 1996). En la costa Pacífico de México, el género *Callinectes* agrupa a las especies de jaiba de importancia comercial de la zona y sostiene pesquerías importantes en los estados de Sinaloa, Sonora, Baja California y Baja California Sur. Las especies *Callinectes bellicosus* (jaiba café) y *Callinectes arcuatus* (jaiba azul) son las que generan prácticamente la totalidad de las capturas comerciales en Sonora y Sinaloa, ya que contribuyen con el 98% de la captura total (entre 65% la primera y 35% la segunda) y con una menor distribución y abundancia, la especie *Callinectes toxotes* (jaiba verde). (Hendrickx, 1993).

Estas especies tienen una longevidad natural de entre 2 a 3 años. Las tallas de los adultos van de 40 a 170 mm de ancho de caparazón (AC). El tamaño promedio para *C. bellicosus* es de aproximadamente 120 mm, mientras que para *C. arcuatus* es de 90 mm, y para *C. toxotes* es de 120 mm de AC. En estado adulto los machos son más abundantes que las hembras (en una relación de 2:1). Los machos son de mayor talla y peso que las hembras en aproximadamente un 20%. La *Callinectes bellicosus* sustenta la pesquería regional en la costa de Sonora y parte del norte de Sinaloa (Molina 1999, Hernández-Moreno 2000, Hudson-Weaber et al., 2001, Márquez-Farías 2001).

Es la más importante en términos de volumen de captura y genera el 95% de las capturas en Sonora (SAGARPA, 2010). Su pesquería constituye una actividad relativamente artesanal que inició hace aproximadamente veinte años como una actividad para consumo humano directo y en pequeño mercadeo (Molina y Montemayor 1998, Montemayor-López 2001, Pérez-Ríos 2001, Ramírez-Félix y Singh-Cabanillas 2003); las artes de pesca que se emplean son muy sencillas y de bajo costo; entre las más comunes están los aros, las fisgas o sacadores, y las trampas o nasas del tipo Chesapeake o similares; siendo estas últimas las que conforman el sistema de pesca más utilizado en la pesquería artesanal de jaiba del norte del Golfo de California (González-Ramírez et al., 1996, Molina 1999).

#### Producción De Jaiba En Sonora

Con base a los datos extraídos del Anuario Estadístico de Pesca 2011, se pueden apreciar en la Tabla 1, los niveles de captura en vivo (kilogramos) y su valor en pesos de la captura de jaiba para los seis estados del país más representativos en esta pesquería, lo que para el Estado de Sonora representa ser el segundo estado con mayor captura de jaiba a nivel nacional, partiendo del hecho de que la captura a nivel nacional para el año en mención, representó 20, 262,000 kilogramos, solamente 732,236 kilogramos por arriba de la captura de los seis estados más representativos.

Estado	Nivel de captura en kilogramos (peso vivo)	Valor en pesos de la captura	Porcentaje de representación
Campeche	1,533,661	\$16,116,914.00	7.86%
Sinaloa	6,074,377	\$67,596,304.00	31.11%
Sonora	4,048,378	\$43,585,931.00	20.74%
Tabasco	1,060,228	\$1,155,288.00	5.43%
Tamaulipas	3,281,704	\$32,739,034.00	16.81%
Veracruz	3,511,416	\$55,527,247.00	17.99%
Totales	19,529,764	\$216,720,718.00	100.00%

Tabla 1: Niveles de Captura y Valor en Pesos de la Pesquería de Jaiba.

En la presente Tabla se muestran los niveles de captura y valor en pesos de la pesquería de jaiba al año 2011, en los seis estados más representativos del país. Fuente: Elaboración propia a partir de los datos obtenidos del anuario estadístico de La CONAPESCA, 2011. Situación De Los Municipios Pesqueros De Jaiba En Sonora

De acuerdo a la investigación documental realizada hasta el momento, existen 22 plantas procesadoras de pescado y marisco, incluyendo la jaiba (Huato, 2005). Dichas plantas se distribuyen principalmente en seis Municipios Costeros; Hermosillo, Guaymas, Caborca, Empalme, Puerto Peñasco y Huatabampo. No obstante, existen otras comunidades con menor desarrollo pesquero, que también son reportadas como zonas costeras productoras de jaiba, como es el caso de San Luis Río Colorado y Etchojoa. En la Tabla 2,

se muestra la participación porcentual de los seis principales municipios de acuerdo al número de procesadoras instaladas en cada uno de ellos y respecto al número total de instaladas en todo el Estado de Sonora. Lo anterior, permite inferir sobre el hecho de que Hermosillo (Bahía de Kino) tiene mayor participación en este tópico, por lo que este criterio, fue uno de los tomados en cuenta para realizar este estudio en primera instancia en esta localidad, ya que en un futuro se pretende abarcar en el área de estudio al resto de zonas productoras en el Estado de Sonora.

Tabla 2: Participación de las Procesadoras de Jaiba en el Estado de Sonora.

Municipio	No. De plantas	% respecto al total en Sonora
Guaymas	5	22.7%
Hermosillo	6	28%
Huatabampo	4	18%
Navojoa	1	4.5%
Empalme	1	4.5%
Puerto Peñasco	5	22.7%
Total	22	100%

En esta Tabla se presentan los seis municipios más representativos en cuanto la captura y procesamiento de jaiba en el Estado de Sonora a partir del número de plantas procesadoras de jaiba instaladas en dichos municipios. Fuente: Construcción propia con base a información obtenida en el directorio de empresas comercializadoras de pescado y marisco del Estado de Sonora.

Las áreas costeras que se tendrían que visitar para los trabajos de campo, se mencionan en la Tabla 3, no obstante, para efectos de la primera etapa de estudio solo se visitó la localidad de Bahía de Kino, perteneciente al municipio de Hermosillo, Sonora, como se muestra a continuación. Las etapas restantes se conformarán a partir de las visitas de las zonas costeras de Puerto Peñasco y Caborca (Zona Norte), en un mismo periodo de tiempo, mientras que en otro bloque de visitas se recorrerán los campos pesqueros de Guaymas, Empalme y Huatabampo (Zona Sur).

Tabla 3: Comunidades y Campos Pesqueros del Estado de Sonora dedicadas a la Pesca de Jaiba.

Municipio	Campo Pesquero			
Hermosillo	Bahía de Kino			
Guaymas	Punta Lobos Yaquis			
Caborca	Ejido Rodolfo Campodónico			
Empalme	Las Guácimas			
Puerto Peñasco	Puerto Peñasco			
Huatabampo	Yavaros			

La presenta Tabla muestra las seis regiones más importantes dedicadas a la pesquería de jaiba en el Estado de Sonora. Fuente: Extraído de Huato Leobardo, (2005). Estudio Socio – Económico de la Pescadería de Jaiba en Sonora y Sinaloa.

Tabla 4: Niveles de Captura y Valor de Comercialización de la Jaiba en Bahía de Kino, Sonora.

Meses	Peso vivo (Kg)	Valor en pesos
Enero	12,232	\$188,046.80
Febrero	2,968	\$33,835.20
Junio	9,561	\$118,078.35
Julio	140,682	\$1,791,976.45
Agosto	396,481	\$4,771,587.80
Septiembre	273,692	\$3,233,127.31
Octubre	266,260	\$3,662,800.05
Noviembre	59,953	\$744,488.40
Diciembre	57,062	\$735,496.65

La presente Tabla detalla los niveles de captura y el valor comercial de la jaiba, en la región costera de Bahía de Kino, Municipio de Hermosillo, Sonora. Fuente: Elaboración propia, a partir de los datos extraídos del Anuario Estadístico de Pesca, 2011.

Para el caso específico de la región costera de Bahía de Kino, municipio de Hermosillo, Sonora, la situación de la pesquería de jaiba al año 2011, se detalla a continuación en la Tabla 4, por nivel de captura, valor en pesos y desglosado por cada mes del año, notándose significativamente que en los meses

# METODOLOGÍA

Para el desarrollo metodológico de este proyecto de investigación, primero fue necesaria una revisión de la literatura existente, sobre todo de fuentes de información oficial como SAGARPA, CONAPESCA, INEGI, FAO, Secretaría de Fomento Agropecuario y Pesquero, Secretaría de Economía, entre otras. También se obtuvo información de fuentes primarias, proveniente de entrevistas a profundidad con encargados de cuatro de las seis comercializadoras ubicadas en la Comunidad de Bahía de Kino, en Hermosillo, Sonora, México. Este estudio se considera de corte transversal, ya que la información analizada corresponde al periodo de captura y comercialización del ciclo productivo 2012. De igual forma, es una investigación de diseño no experimental, ya que la información se maneja de forma cuantitativa para una mejor interpretación, pero no se modifica los argumentos originales de las fuentes de información primaria. De acuerdo a las fuentes oficiales, la población de comercializadoras de jaiba en la localidad de estudio es de seis, de las cuales las cuatro comercializadoras con las que se logró establecer contacto para la aplicación de la entrevista a profundidad se enlistan en la Tabla 5.

Tabla 5: Empresas Comercializadoras de Jaiba en la Localidad de Bahía de Kino.

Empresa	Contacto	Industrialización	Mercado Final
Verónica Aguirre Martínez	Verónica Aguirre Martínez	Jaiba	Houston, Texas, USA.
ELELE, S.A. de C.V.	Germán Saracho Martínez	Jaiba	Miami, Florida, USA.
Pescadería El Carcanchón	Juan Carlos León Nieblas	Jaiba	Mochis, Sinaloa, México
Comercializadora Tamaulipas	Salvador Alejandro Ruiz Mallozi	Jaiba	Brownsville, Texas, USA.

En esta Tabla se muestran las cuatro comercializadoras que se contactaron en la región costera de Bahía de Kino del municipio de Hermosillo, Sonora. Fuente: Elaboración propia a partir del directorio de empresas comercializadoras de pescado y marisco del Estado de Sonora, así como información proporcionada directamente por los representantes de las Empresas Comercializadoras de Jaiba de esa localidad.

La metodología utilizada para la interpretación de los resultados obtenidos de las entrevistas que se aplicaron a cada uno de los encargados de las comercializadoras de jaiba de la región, fue a través de un análisis de la industria o del sector industrial de pesca, específicamente, la pesquería de jaiba, haciendo uso del análisis de las cinco fuerzas competitivas de Michael Porter, donde se analizó la capacidad y poder de negociación de los proveedores y de los compradores; la rivalidad interna existente en el mercado por el cual se compite; la amenaza de posibles comercializadoras entrantes al mercado y los productos sustitutos de la jaiba, tanto en la región como en el mercado donde se comercializa.

# RESULTADOS

Con base en los datos proporcionados por las mismas comercializadoras, se realizó una estimación del porcentaje de captación de la producción de jaiba por parte de estas cuatro empresas, tal y como se muestra en la Figura 1; así como información referente a su integración con la población local, a través de la generación de empleos directos; apoyo al desarrollo productivo y sustentable de este sector pesquero; pero también un control o influencia en la fijación de precios para este crustáceo.

Partiendo de los resultados obtenidos de las entrevistas, se puede inferir que el sector está constituido prácticamente por cuatro empresas, las cuales dominan gran parte de la región, ejerciendo control en la fijación de los precios de la jaiba, de acuerdo a la demanda y producción en la temporada, lo que significa que existe un gran poder de negociación por parte de los compradores; asimismo, negocian cantidad y calidad en el producto; es decir, tamaño o talla que va directamente proporcional al peso de la jaiba.

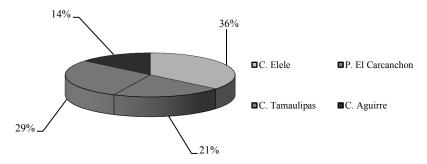


Figura 1: Participación de las Comercializadoras en el Mercado de Jaiba.

En la presente Figura se muestra la participación que tiene cada una de las comercializadoras en el mercado de jaiba en la región costera de Bahía de Kino, Sonora, destacándose que el 100% es igual al total comprado por las cuatro comercializadoras. Fuente: Elaboración propia a partir de los resultados de las entrevistas realizadas.

Por otro lado, los proveedores del producto (pescadores de jaiba) se puede determinar que no tienen poder absoluto o el poder en caso de tenerlo es limitado, en cuanto a la negociación de los precios, tiempo de entrega y cantidades de producto para su compra. Este suceso está dado por los contratos de exclusividad con las comercializadoras en tanto que éstas le suministran insumos para llevar a cabo la actividad pesquera de la jaiba. En cuanto a la rivalidad existente en el mercado donde se compite es relativamente moderado, con tendencia a ser más fuerte en los meses de agosto a octubre, cuando la captura se dispara considerablemente y la demanda aumenta en el mercado. En ese sentido, los precios que se pagan por kilo de producto bajan, es cuando la rivalidad se inicia en las comercializadoras, negociando los precios, ya que esta estrategia está centrada en la competencia de precios, dando por resultado, precios inferiores a los costos de producción y captura suponiendo niveles inferiores de ganancias para los pescadores de jaiba. También se analizó la posible entrada o amenaza de ingreso de nuevas procesadoras y comercializadoras de jaiba en la región. En ese sentido, es importante señalar que, para ingresar a este sector industrial en la región objeto de estudio estará en función de las barreras de ingreso que las comercializadoras ya posicionadas en el mercado impongan o desarrollen estratégicamente, con la finalidad de frenar la posible adquisición de una posición en el mercado por otra empresa o comercializadora que intente o decida ingresar al sector.

Por último, la amenaza de los productos sustitutos. Cada una de las empresas está compitiendo en un sentido general y saben que las utilidades del sector serán reprimidas entre más atractivos sean los sustitutos, como productos que desempeñan la misma función. En este sector existen muchos productos marinos que cumplen y desempeñan la misma función, la cual es la de proveer una alimentación sana y nutritiva, como lo hace la jaiba en sus diferentes presentaciones, entre los cuales se puede mencionar al camarón; cangrejo; almeja; callo de hacha; ostión; entre otros, que también se produce y captura en tiempos diferentes que el ciclo productivo de la jaiba; sin embargo, los precios de comercialización son más altos por los costos que conlleva su captura.

#### CONCLUSIONES

Se concluye que a partir del análisis de las cinco fuerzas de Michael Porter y de las relaciones comunes que se dan entre las principales procesadoras y comercializadoras de jaiba de la región, que la industria pesquera de jaiba está conformada y dominada por cuatro empresas específicamente, las cuales tienen el poder de negociación sobre los proveedores y como compradores del producto; asimismo, la rivalidad existente entre ellas es de tal magnitud e intensidad que tienen la facilidad de imponer barreras de entrada a posibles competidores y/o empresas que quieran tener alguna participación en el mercado. Algunas de las barreras de ingreso más comunes implementadas por las empresas que participan activamente en el mercado de la jaiba, se encuentran la fijación de precios en la compra del producto; mayor y mejor distribución y comercialización; estandarización y automatización de los procesos productivos; estableciendo mejores relaciones laborales y generando mayores oportunidades de empleos directos; apoyando con el suministro de implementos para la captura de la jaiba a los pescadores de la región; mayor incidencia e impacto en el desarrollo sustentable de la zona, entre otros factores, que son bien valorados por los habitantes de la región costera, ya que propicia al crecimiento económico, social y productivo de la misma región, con un claro compromiso de establecer condiciones regulatorias en materia de sustentabilidad y preservación de la especie (jaiba).

Por otra parte, es importante mencionar que la oportunidad de crecimiento y expansión de las empresas procesadoras y comercializadoras de jaiba de la región costera de Bahía de Kino, Sonora, es con alto potencial y con tendencia a crecer, ya que la demanda en el consumo del producto en los mercados estadounidenses cada vez es mayor por su alto contenido proteínico y nutricional. Es por ello, que es recomendable apoyar iniciativas que den cabida al diseño de estrategias óptimas para el buen manejo de la pesquería de jaiba en la región, que vayan específicamente encaminadas a la protección y preservación de la especie y de los pescadores que dependen de esta actividad pesquera. Asimismo, promover intensamente los productos derivados de la jaiba en los distintos mercados internacionales y nacionales, con la finalidad de incentivar a las empresas procesadoras y comercializadoras de jaiba a optimizar el proceso de industrialización, transporte, comercialización y presentación y empaque de los productos derivados de la pesquería de jaiba en la región costera de Bahía de Kino, Sonora.

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# LA CAMARONICULTURA EN EL ESTADO DE SONORA, MÉXICO: DESDE EL PUNTO DE VISTA ADMINISTRATIVO Y PRODUCTIVO

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### RESUMEN

La situación por la que atraviesa la actividad camaronícola en el estado de Sonora, México, obliga a los productores a pensar en nuevas formas de producir el crustáceo. Los datos, conclusiones y recomendaciones que se presentan en este documento corresponden a una revisión de las estadísticas, situaciones y experiencias del estado de Sonora, pero por su naturaleza puede ser adaptado a diferentes áreas geográficas. Esta investigación expresa que hasta el año 2012 no se ha realizado ningún esfuerzo significativo por cultivar el crustáceo en un sistema tal, que permita el control de la producción y así llevarla a los niveles que se manejan en la industria de los países asiáticos, principalmente.

PALABRAS CLAVE: camaronicultura, cultivos intensivos, rentabilidad, desarrollo sustentable.

# THE SHRIMP FARMING IN SONORA STATE, MEXICO: FROM AN ADMINISTRATIVE AND PRODUCTIVE POINT VIEW

#### ABSTRACT

The situation of the shrimp culture in Sonora, State of Mexico, requires producers to think of new ways to produce the crustacean. The data, conclusions and recommendations presented herein are for a revision of statistics, situations and experiences of the state of Sonora, but by its nature can be adapted to different geographic areas. This research found that until 2012 has not made any significant effort to cultivate the crustacean in such a system, which allows control of production and thus bring it to levels that are used in the industry of Asian countries mainly.

JEL: 013, 031, 044

**KEYWORDS:** shrimp farming, intensive farming, profitability, sustainable development.

#### **INTRODUCCIÓN**

La camaronicultura es una actividad que cada vez alcanza mayor importancia a nivel nacional y sobre todo regional ya que Sonora aporta más del 62% de la producción nacional (81,000 TM). Esto hasta el año 2009, pero del 2010 al 2012 la productividad bajó a menos del 50% debido a la presencia del síndrome del virus de la mancha blanca (WSSV por sus siglas en inglés) (COSAES, 2012).En el estado de Sonora operan actualmente poco mas de 25,000 has bajo el sistema conocido como semiintensivo, el cual por sus características, no se puede lograr el control adecuado sobre los factores ambientales y biológicos, lo que lo hace muy riesgoso (Whetstone *et al*, 2002). El objetivo de este trabajo es dar a conocer, cual es la situación por la que pasa la camaronicultura en Sonora, México, mediante la

investigación de las estadísticas, programas, estudios y datos que aportan información valiosa para la industria y que de una forma práctica son conjuntados, analizados y presentados en este documento.

#### **REVISION LITERARIA**

La idea tradicional para el cultivo de camarón en nuestro país es el uso de los sistemas conocidos como semiintensivos, donde se utilizan grandes extensiones de tierra, estanques de 5 a 10 has, recambios de agua de rutina del 15% diario, donde se espera que el clima sea apropiado para el cultivo y que las enfermedades o los vectores de estas se mantengan fuera de las instalaciones (Timmons *et al*, 2002; Whetstone *et al*, 2002). Algunos productores se han inclinado por la idea de reducir las densidades de siembra con el fin de mitigar el impacto ecológico que el cultivo ocasiona al medio ambiente, dentro y fuera del estanque, incluso existen reglamentos que lo establecen (SAGARPA, 2012). Esta medida puede ser justificada desde el punto de vista del sentido común, pero con una demanda en expansión y una población mundial en rápido crecimiento y la opinión de la mayoría de los conocedores del tema, que afirman que la acuacultura es la única actividad que va a poder ofrecer los productos del mar a la población demandante, es lógico pensar que la solución está en la intensificación de los sistemas de cultivo para incrementar la productividad. En este sentido es necesaria la investigación de técnicas de producción sobre bases científicas en el área de la nutrición y la prevención y control de enfermedades y además de una visión más amplia en el uso de otras técnicas o sistemas de cultivo.

#### METODOLOGIA

Para entender los retos a los que se enfrenta la camaronicultura del estado de Sonora, México, fue necesario hacer una revisión bibliográfica donde se habla de la historia de la actividad y de los éxitos, fracasos y sobre la evolución de las técnicas de cultivo.Como primera fase se realizó una indagación sobre los reportes estadísticos de los organismos gubernamentales, en los cuales se exponen aspectos tales como el número de hectáreas abiertas a cultivo, las producciones por zona, la tecnología utilizada, entre otros (CONAPESCA, 2011). A su vez la investigación se dirigió a indagar los avances y aportaciones científicas que se han realizado en los últimos años. Otro de los aspectos investigados y que se consideran de mayor importancia, son los resultados obtenidos en cuanto a producción y productividad del sector en los últimos 10 años, la cual se presenta en la Tabla 1.

De igual manera se expresan en este documento los puntos de vista de los productores y de las personas involucradas en la actividad, donde la información no esta publicada pero que es de suma importancia por la fuente de donde proviene, siendo esta útil para discutir muchos de los aspectos que se tratan aquí y que la cual se considera veraz y trascendental por el sentido y la preocupación que los productores tienen al respecto. A su vez se indagó al respecto de los esfuerzos que algunos investigadores están realizando en el desarrollo de tecnologías que ayuden a la camaronicultura a convertirse en una actividad sustentable, amigable con el ambiente, socialmente responsable y económicamente rentable.

#### RESULTADOS

En la tabla 1 se muestran las estadísticas generales de producción de camarón cultivado en el estado de Sonora, donde se puede observar que los últimos dos años ha disminuido a menos del 50%. Donde se tenía una expectativa de producir cerca de 93,000 TM solo se ha obtenido poco más de 40,000 TM (COSAES, 2012).

AÑO	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Hectáreas abiertas a cultivo	11,752	11,373	15,824	18,904	18,771	18,208	21,038	23,066	25,232	25,133
Producción (TM)	24,500	36,247	50,634	55,652	66,030	68,510	81,311	81,422	49,400	40,697
Productividad (TM/ha)	2.03	3.19	3.20	2.94	3.52	3.76	3.86	3.53	1.96	1.62

Tabla 1: Resultados de producción de camarón de cultivo en el estado de Sonora, México.

Producción de camarón de cultivo de los últimos 10 años en el estado de Sonora, México. El crecimiento en infraestructura es proporcional a las producciones obtenidas a través de los años, pero en los últimos dos hay un decremento de alrededor del 50% (Fuente: COSAES; información al 15 de Diciembre del 2011).

En los últimos 10 años en Sonora se han construido 13,381 hectáreas en el sistema semiintensivo (Whetstone *et al*, 2002). Estos sistemas se caracterizan por el poco control que se tiene sobre los aspectos de la calidad del agua y el control de muchas de las variables que influyen en la salud de los organismos en cultivo. Según) una de las principales razones de los problemas que se tienen en la actualidad en la camaronicultura, son las malas practicas de producción, donde los estanques son sembrados muy por encima de su capacidad de producción (Martínez-Córdoba *et al*, 2009; Páez-Osuna *et al*, 2003).Algunos productores expresan que se requieren hacer investigaciones importantes en el área de la nutrición y de la sanidad. Específicamente, en el área de nutrición se tiene un problema grave, puesto que la mayoría de la industria pecuaria utiliza alimentos balanceados con harina de pescado como fuente de proteínas de alta digestibilidad, lo que incrementa con esto el coste de los pienzos y por consiguiente los de la producción (Martínez-Córdoba *et* al, 2009).

Algunos otros se inclinan por la reducción de las densidades de siembra sacrificando los volúmenes de producción, solo que la demanda mundial del crustáceo obliga a la industria a seguir produciendo cada día mas (FAO, 2010), por lo que con estas acciones solo se hasta logrando el producir menos sin la seguridad que ofrecen los sistemas semiintensivos.En el ámbito de la nutrición se han hecho muy pocas mejoras o avances tecnológicos, puesto que se sigue dependiendo del insumo más caro económica como ecológicamente, como es la harina de pescado. Pero se ha buscado sustituir este insumo con harinas de origen vegetal y los resultados mas importantes los presentan Olmos *et al* (2011), con un ensayo llevado a cabo con *Litopenaeus vannamei*, en el que sustituyeron la harina de pescado en un 100% con harina de soya y sepas de probióticos bacterianos, con resultados muy alentadores y donde expresan que incluso esta formulación le brinda a los organismos una mejor repuesta inmune y resistencia a las condiciones adversas de la calidad del agua.

#### CONCLUSIONES

En la presente investigación se obtuvieron datos importantes en cuanto a la situación que guarda la camaronicultura en el estado de Sonora, México, principalmente a lo referente a las producciones que se han obtenido. Con la revisión de los resultados de producción, los boletines emitidos por los organismos gubernamentales y los resultados publicados en el sitio web de COSAES y CONAPESCA, se aprecia que la principal causa de las bajas producciones son las epizootias ocasionadas por virus, principalmente el virus de la mancha blanca (WSSV por sus siglas en inglés).

Observando y analizando la evolución que ha experimentado la camaronicultura en Sonora, podemos ver que en los últimos 10 años se han construido mas de 13,800 has, que representan 115% de incremento, pero es importante observar que no se ha hecho ninguna modificación sustancial a la metodología y sistema de cultivo empleado, ya que toda esta área se ha instalado con el sistema conocido como semiintensivo (COSAES, 2012).Una de las alternativas mas viables para hacer de la camaronicultura una actividad sustentable está el uso de los sistemas intensivos, los cuales utilizan estanques pequeños de 0.5 a 1.0 has, aireación mecánica del agua, probióticos y prebióticos para el suelo y agua, filtración del agua por debajo de los 50 micrones, densidades mayores a 150 organismos/m<sup>2</sup> y raciones de alimentación mas frecuentes. En estos sistemas se pueden lograr producciones 10 veces mayores que en los sistemas

semiintensivos (Whetstone *et al*, 2002). Esta alternativa no solo mejora las condiciones en las cuales se desarrollan los organismos en cultivo sino que permite tener un mejor control de los parámetros ambientales físicos, químicos y biológicos. Restaría hacer un análisis muy profundo en cuanto a los costes de operación de este sistema, pero se entiende que el ahorro de agua y tierra es verdaderamente sustancial, puesto que se requiere de aproximadamente el 10% de la tierra y de 6% del agua (Whetstone *et al*, 2002; Timmons *et al*, 2002). Con todo esto resta mencionar que la industria del cultivo del camarón no solo requiere de grandes inversiones, sino de un cambio en el sistema de producción que sea sustentable, amigable con el ambiente, socialmente responsable y económicamente rentable.

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# RETOS DE LA BANCA COLOMBIANA PARA MEJORAR LA PROFUNDIZACIÓN FINANCIERA

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#### RESUMEN

En el presente artículo se efectúa un acercamiento a la situación actual de la bancarización en el mundo y en especial en regiones como Latinoamérica y el Caribe. Igualmente se describen las razones básicas por las cuales la bancarización en el mundo no ha llegado a verdaderos niveles de bienestar para la población y se describen los grandes retos de la banca colombiana para mejorar el nivel de profundización financiera. El análisis central se desarrolla a partir de un recorrido por las estadísticas de bancarización o penetración financiera en Colombia, frente a algunos países y a la evaluación crítica de los mitos que sobre la banca se mencionan de manera constante en el ámbito nacional. Los resultados del estudio reflejan que más que mitos, es una realidad que los costos de los servicios en el sistema financiero son elevados y se convierten en una barrera para la inclusión financiera o para el acceso de la población a los productos y servicios de la banca, que la mala imagen de la banca se sustenta en las estadísticas de quejas que se registran en la superintendencia financiera; en las cuales la mala atención es el común en los distintos establecimientos financieros y que al sistema financiero le ha faltado interés por la alfabetización financiera de la población colombiana. Por último, se describen los retos que en aspectos tecnológicos, de eficiencia, de educación financiera, de cobertura, de estructura de costos y otros, debe enfrentar la banca colombiana para mejorar la profundización financiera.

PALABRAS CLAVE: Mitos, Profundización Financiera, Inversión Extranjera, Intermediación, Bienestar.

# CHALLENGES OF THE COLOMBIAN BANKING SYSTEM IN ORDER TO IMPROVE THE FINANCIAL DEEPENING

#### SUMMARY

In the present article we make an approach to the current situation of the bancarization in the world, especially in regions such as LatinAmerica and the Caribbean. Equally, we describe the basic reasons for which the bancarization in the world hasn't reached true levels of welfare for the population and the big challenges of the Colombian banking system to improve the level of financial deepening. The central analysis is developed from a review of the bancarization of some banking system's myths that are mentioned constantly all over the nation. The result of the study reflects that more than myths, there is a reality that shows that the costs of the financial services are high and represent a barrier to the financial inclusion or to the access of people to the banking products and services, and also that the banking system's bad image is supported by the statistics of complaints that are registered by the Superintendencia Financiera in which the bad service is common in the financial institutions and that the financial system hasn't had any interest for the financial alphabetization of the Colombian citizens. Finally, we describe the challenges related to the technological aspects, efficiency, financial education, coverage, cost structure and others, which the Colombian banking system must face in order to improve the financial deepening.

KEY WORDS: myths, financial deepening, foreign investment, intermediation, welfare,

#### INTRODUCCIÓN

Uno de los sectores sobre los cuales recae la mayor cantidad de mitos en Colombia, es sin lugar a dudas el sector bancario. La mayoría de los colombianos bancarizados y no bancarizados tienen un mal concepto sobre la banca Colombiana y en especial sobre los servicios que esta presta. Según los resultados de la encuesta benchmark sobre los servicios de la banca, se logra establecer que la población en general tiene algún conocimiento básico de la banca. Sin embargo; únicamente el 14% de la población dice tener confianza del sector y el 47% de quienes verdaderamente poseen productos con el sector confían en el mismo. Esta situación se encuentra en contravía con las expectativas, conocimiento y confianza que refleja la banca en los mercados externos.

La banca Colombiana ha tomado una fuerza impresionante en las decisiones de los banqueros extranjeros como resultado de la solidez, la regulación y las proyecciones que este sector posee en Colombia. Esta confianza se ve reflejada en las grandes adquisiciones y en especial en la llegada de grandes inversionistas al país que han ido reacomodando la estructura de inversiones de este sector. Sin embargo, la desconfianza del cliente y de la población en general, le dejan a la banca un reto aún más difícil de cumplir, toda vez que ésta desconfianza se soporta en aspectos como elevados costos en los servicios, la calidad en la prestación de algunos servicios; los cuales se soportan en las estadísticas de quejas y reclamos del sector y en los bajos niveles de bancarización que persisten en el sector.

El presente artículo se estructura como sigue: se presenta una revisión de literatura en la que se describen aspectos básicos del estado actual de la profundización financiera en Colombia, se analizan los soportes al argumento de los elevados costos de los servicios de la banca, se relacionan conceptos de autoridades y analistas económicos en torno al sistema financiero y la banca en particular y se describen las estadísticas de información que fundamenta el reto actual de la Banca en Colombia. Seguidamente se describe la metodología para identificar los grandes retos de la Banca colombiana y posteriormente se muestran los resultados de la profundización financiera en Colombia, el análisis a los principales mitos de la banca colombiana, los niveles de penetración de la banca extranjera y se particulariza sobre las acciones estratégicas que deben ejecutar los bancos en Colombia para mejorar su imagen, confianza y los niveles de profundización.

#### **REVISIÓN DE LITERATURA**

Según el 3° Informe de evolución de las tarifas de los servicios financieros de la Dirección de Investigación y Desarrollo - Subdirección de Análisis e Información de la Superintendencia Financiera de Colombia (2012): "En los últimos años la información de los servicios financieros se ha venido constituyendo como un elemento estratégico respecto a las necesidades de los consumidores financieros y las políticas de inclusión al sistema financiero. Al respecto, el conocimiento de las tarifas es un aspecto básico para que los individuos participen activa y responsablemente en los procesos económicos y financieros de sus hogares. Un usuario que conoce sus derechos y obligaciones cuenta con información suficiente, oportuna y dispone de las herramientas adecuadas para la toma de decisiones".

De la misma manera la Superfinanciera en su informe (Junio 2012) enfatiza: "Una de las políticas estructurales que permite mejorar la formalización de la actividad económica, el fortalecimiento del recaudo tributario y el financiamiento adecuado de los proyectos de inversión es el mejoramiento de la inclusión financiera. Igualmente, dicho mecanismo permite medir el alcance de las políticas públicas impulsadas por el Gobierno Nacional. En términos generales, la inclusión financiera puede medirse a través de cuatro ejes temáticos: *Acceso, Calidad, Uso y Bienestar*. El *acceso* está relacionado con la capacidad para acceder a los productos y servicios financieros, considerando posibles barreras de entrada (asimetrías de información, proximidad física, costos, entre otros). La *calidad* se materializa con los atributos de los productos y servicios financieros con el perfil de cada consumidor. El *bienestar* se

encuentra asociado con la cuantificación del efecto de los productos financieros y servicios sobre la calidad de vida de los habitantes y el impacto sobre la productividad de la sociedad. Finalmente, el indicador de *uso* considera aspectos relacionados con la regularidad de los servicios financieros, la frecuencia en la cual se brindan los productos, los plazos en los cuales se suscriben los servicios, entre otros. En este sentido, los servicios que provee el sector financiero deben ser ofrecidos de manera conveniente a los consumidores. Al respecto, para que el acceso sea adecuado debe estar acorde con unos lineamientos generales que permitan incrementar la disciplina de mercado, reducir la asimetría de información y contribuir a la educación del consumidor financiero. En este sentido, puede entenderse la inclusión financiera como el acceso universal y continuo de la población a productos y servicios financieros diversificados, satisfactorios, conforme a una estructura de negocio formal ajustado a riesgos, de tal manera que satisfaga el bienestar de los consumidores".

De acuerdo a lo citado en por Cática y Parra (2012). "En el marco de la conferencia "Desarrollo Financiero en América Latina: logros y desafíos" y "Desarrollo Financiero en América Latina y el Caribe: la ruta hacia delante", desarrollada el día 7 de Diciembre del año 2011, se divulgó el estudio sobre servicios financieros en América Latina realizado por la CAF, en el que se concluye que la baja bancarización que se refleja en América Latina es un gran impedimento para el desarrollo económico de la región". Está claro que los pobres niveles de bancarización de la población limitan las posibilidades de fortalecer la dinámica de la economía. Menos población con acceso a los servicios financieros significa en muchos casos mayor número de personas que acuden a la informalidad, acrecentando las dificultades para salir de situaciones de estrechez económica de los no bancarizados.

Sin embargo, este problema no suele ser únicamente de Colombia, pues según informe del Banco Mundial, la profundización financiera en América latina y el Caribe; medida por el accesos a productos de captación de la población llega al 39%, mientras que en países con economías desarrolladas este indicador llega al 89% y el promedio de profundización en el mundo llega al 50%. Véase Figura 1.

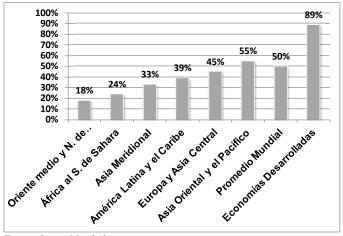


Figura 1: Porcentaje de Población Adulta Con una Cuenta En Una Institución Financiera

Estos resultados se dan como efecto de aspectos que la población considera son grandes obstáculos al momento de tener relación alguna con el sistema financiero. Y si se trata de tener una cuenta de ahorros, el informe del banco Mundial que está sustentado en el estudio de profundización financiera de *Global Findex*, explica que una de las razones de mayor peso está en la insuficiencia de recursos o de dinero para efectuar depósitos en los Bancos. Tal como lo afirma el director de investigaciones económicas de FELEBAN, Saza (20012), "el ingreso per cápita en Colombia aún es muy bajo y no permite un mayor grado de penetración, sobre todo si hablamos de ingresar a la banca. Esto se debe a que todavía hay mucha informalidad económica a nivel local, sobre todo con empresas que no están pagando ni impuestos, y mucho menos seguridad social".

Fuente: Banco Mundial

La principal razón para no acceder a una cuenta de ahorros; según el informe del Banco Mundial, representa un 30% frente al total de razones o argumentos para no poseer este tipo de producto, Véase Figura 2. Le sigue el elevado costo de los servicios financieros, tal como Cática y Parra (2012), lo describen: "La tasa de interés que reconocen los bancos por sus depósitos de ahorro, que no sobrepasan el 2% efectivo anual, ni siquiera reconocen el costo del dinero a través del tiempo (inflación de 3,5% efectivo anual según expectativas del BR). Pero el cobro (costo) por las operaciones que realizan los bancos si supera la tasa máxima de usura".

Otro obstáculo o aspecto que incide en la baja penetración financiera, según el estudio, corresponde a la falta de confianza de la población en la banca. En Colombia, este aspecto es relevante, pues de acuerdo a las cifras de quejas de la *Superintendencia Financiera de Colombia*, relacionadas en el Diario la República del 17 de Octubre del año 2012, "al mes de agosto de 2012, del total de reclamos recibidos en todo el sistema financiero, el 70% corresponde al sector bancario, le sigue el sector asegurador con 10% y el régimen pensional de prima media con el 7%. El principal motivo de reclamo es la indebida atención al consumidor financiero, seguida por las fallas en liquidación y/o revisión, fallas en cajeros automáticos y el reporte de centrales de riesgo. Dichas quejas son un reflejo de cierto inconformismo, pero cabe resaltar que el volumen presentado ha disminuido en los últimos meses"

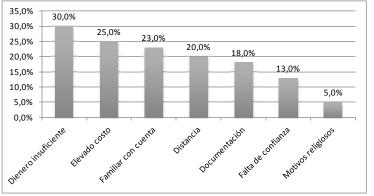


Figura 2: Principales Obstáculos En El Mundo Para Usar Cuentas Formales.

Fuente: Banco Mundial

Es evidente que los costos en los distintos servicios financieros que ofrece la banca colombiana son elevados y ello genera mayor desconfianza de la población hacia los establecimientos bancarios, tal como lo corrobora el informe del Banco mundial.

#### METODOLOGÍA

Para llegar a una definición de acciones estratégicas o retos de la banca para mejorar los niveles de profundización financiera en Colombia, basta con confrontar los denominados mitos de la banca con las realidades que en su mayoría logran corroborar que esos denominados mitos son en esencia una realidad que aún no quieren reconocer de manera abierta los bancos de la región y del mundo entero. Las distintas cifras que sustentan el costo de los servicios se comparan con tarifas de otros países de la región, desde lo cual se puede evidenciar la distancia de los costos de los servicios financieros en Colombia frente a los costos de los otros países con los cuales se efectúa esa comparación.Esta información de costos de los servicios, se enriquece con informes y cifras de la superintendencia financiera de Colombia, en los cuales se logra identificar deficiencias del sector en aspectos como: atención al público, quejas por liquidación de intereses, mala atención en los puntos de la banca y otros aspectos que de manera precisa llevan a

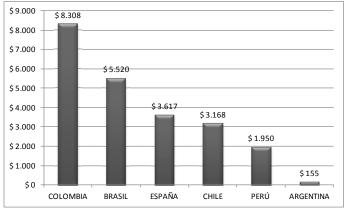
justificar los retos que deberá enfrentar la banca para no desfigurar la imagen de sector sólido, apetecido por los grandes inversionistas extranjeros y con grandes proyecciones.

#### RESULTADOS

#### El Costo De Los Servicios Financieros

Uno de los mitos sobre los cuales más se escucha hablar por parte de los Colombianos corresponde al elevado costo de las operaciones realizadas en la banca y que técnicamente se conoce como servicios financieros. Se le suele denominar "mito" como una forma de no aceptar de manera directa que efectivamente el costo de estos servicios castiga de manera significativa el bolsillo de los clientes de la banca. Dificilmente las cifras podrán seguirle dando el calificativo de mito al coto de los servicios financieros. La realidad corresponde a costos que superan a países de la región en operaciones de captación (ahorros) y colocación (tarjetas de crédito), por tomar solo algunos de los servicios que más se usan en Colombia. La figura 3 muestra el costo promedio de la cuota de manejo de tarjeta débito en algunos países del mundo. Se puede apreciar que el mayor costo en pesos colombianos (COP) lo tiene Colombia con \$8.308 frente a un costo de la banca Argentina por valor de \$1.55, según cálculos de ASOBANCARIA de acuerdo a información de las entidades reguladoras y bancos centrales de cada país.

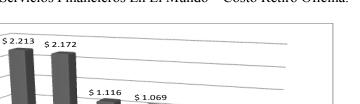




Fuente: Entidades reguladoras y bancos centrales de cada país – Cálculos Asobancaria

En el caso del costo de cada retiro dese la oficina en la cual el cliente posee su cuenta, Perú toma la delantera, pero Colombia se mantiene en uno de los más costosas. En promedio, efectuar un retiro en una de las oficinas de la banca Colombiana cuesta \$1.069 mientras que en México ese costo llega únicamente a \$439. Véase Figura 4.

Pero además, si el cliente posee una tarjeta de crédito, se encontrará con que la tarifa que se cobra por el manejo de la tarjeta difiere en costo de manera sustancial entre un país y otro. Es importante aclarar que este costo corresponde únicamente a la tarifa que se cobra de manera mensual por el manejo de la tarjeta. En él, no está involucrada la tasa de interés que debe pagar el tarjetahabiente por las operaciones de financiación que realice. En este servicio Colombia se destaca por el elevado costo que le carga al manejo de la tarjeta de crédito. Mientras un país como México cobra en promedio \$5.433, Colombia lo supera con la astronómica suma de \$17.210. Véase Figura 5.



\$ 667

\$439

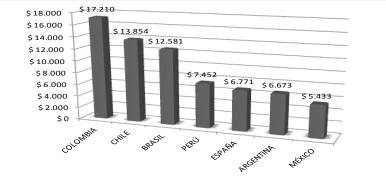
METICO

Figura 4: Costo Servicios Financieros En El Mundo – Costo Retiro Oficina.

COLOMBIA

Fuente: Entidades reguladoras y bancos centrales de cada país – Cálculos Asobancaria

BRASI





VENELUEL

Fuente: Entidades reguladoras y bancos centrales de cada país – Cálculos Asobancaria

### La Mala Atención De La Banca

\$2.500

\$ 2.000

\$1.000

\$ 500

\$0

PERIO

ARGENTINA

Este es un aspecto que ha marcado por años la imagen de los bancos colombianos. Los colombianos del común tienen un mal concepto de la banca, pero no necesariamente de su propio banco. Según la encuesta de Ipsos 2010 el 14 de la población bancarizada de Colombia posee una imagen desfavorable de la banca, mientras que el 10% de la población tiene mala imagen de su propio banco. Pero a nivel general, el 18% de las personas no confían en la banca y el 47% tiene una imagen favorable de la misma. Esa imagen que se tiene de los bancos está soportada en las distintas quejas que se reciben en la Superintendencia Financiera de Colombia y que en su mayoría corresponde precisamente a los establecimientos bancarios, las cuales sumaban al mes de Noviembre del año 2010 un total de 2.234 quejas, de las cuales el 71% corresponden a quejas sobre los bancos. Véase Figura 6.

Al discriminar de manera detallada el motivo de las quejas, se observa que en el mismo informe de la Superintendencia Financiera de Colombia el principal motivo corresponde a la indebida atención al consumidor. Este motivo corresponde al 32% de las quejas y corrobora la realidad de la mala atención de los establecimientos bancarios en Colombia. Ver Figura 7.

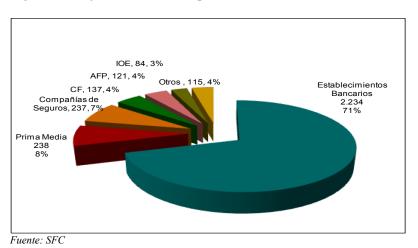
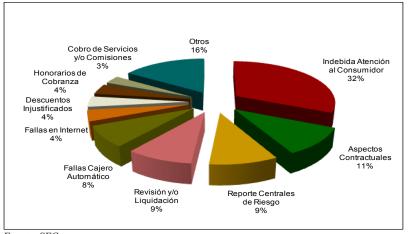


Figura 6: Quejas recibidas SFC por sector Noviembre 2010

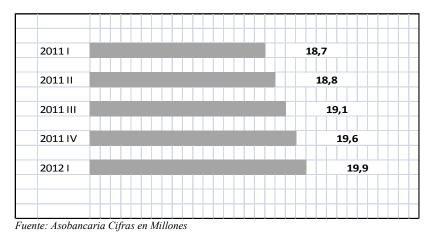
Figura 7. Quejas recibidas SFC De Acuerdo a Motivos Más Significativos Noviembre 2010



Fuente: SFC

### El Difícil Acceso A La Banca

El difícil acceso a la banca se ve reflejado, entre otras cosas, mediante los indicadores básicos de bancarización. Las tareas pendientes de la banca en este aspecto son de gran significado para lograr mejores indicadores. Pues el número de personas con al menos un producto financiero viene creciendo de manera lenta. Al primer trimestre del año 2012 se tenían alrededor de 19.9 millones de personas con al menos un producto financiero. Ver Figura 8.



#### Figura 8: Personas Con Al Menos Un Producto Financiero. 2011 -2012

#### La Mala Fama de La banca

Son muchos los aspectos sobre los cuales la población colombiana esgrime argumentos de la mala fama de los bancos. El primero de ellos corresponde al impuesto sobre las transacciones financieras que se creó en el año 1999 como un impuesto del 2 por mil destinado para reconstrucción del eje cafetero; sector de la geografía colombiana que fue sacudida por un terremoto de grandes proporciones. Este impuesto con el tiempo se convirtió en impuesto del cuatro por mil y en ocasión de la crisis financiera del año 2009 se destinó para financiar al FOGAFIN; Fondo de garantías de Instituciones Financieras.

Bajo este panorama, la gente piensa que con recursos del pueblo se salvó a la banca de la crisis que debieron enfrentar y que para muchos fue provocada por los mismos bancos. Son muchos los que piensan que las abreviaturas de Sociedad Anónima (S.A.) de los bancos, no son más que el fiel reflejo de lo que en la realidad son; es decir "Sin Alma". En parte por los requisitos para acceder a los servicios, por las tarifas y desde luego por las ejecuciones que en casos de morosidad la banca debe realizar como acto ineludible de responsabilidad. En este sentido se debe reconocer que la banca desarrolla un papel de dinamizador de la economía en la medida en que canaliza recursos hacia unidades o actividades que requieren de apalancamiento para la ejecución de sus proyectos. Según cifras de la Superintendencia Financiera de Colombia, a la fecha (Octubre de 2012) la cartera de crédito llegó a la cifra de \$233.14 Billones, que significa un crecimiento real anual del 12,77%.

#### Los Retos

La banca Colombiana tiene hoy una participación de la inversión extranjera del 24,7%, es decir; los extranjeros son dueños del 24,7% de la Banca. Esta situación está muy distante de lo que se hubiese podido imaginar treinta años atrás. Curiosamente mientras los bancos europeos deben liquidar sus inversiones en nuestro país para soportar las exigencias de liquidez en su región, otros bancos del sur del continente llegan no solo para aprovechar las oportunidades de expansión sino para fortalecerse gracias a las expectativas de crecimiento.Los primeros bancos en llegar fueron el Banco Santander y el BBVA, luego llegó el Citibank y numerosos inversionistas de Canadá, Estados Unidos, Perú y Chile, también se interesaron en el sector financiero colombiano. Esto significa que de un total de activos que maneja la banca de \$295,3 billones de pesos, \$79,03 billones pertenecen a los jugadores internacionales. Detrás de estas cifras está el verdadero papel que deberá cumplir la banca colombiana con o sin recursos de los inversionistas foráneos. Estos aspectos se relacionan como sigue:

- Se deberá mejorar en los resultados integrales de la banca, es decir; deberán mejorarse los resultados para los inversionistas, pero desde luego para los clientes que son quienes soportan la actividad de

- Las inversiones deberán canalizarse para permitir que la banca llegue a zonas donde tiempo atrás no existían operaciones o relaciones con la población. Este tipo de vínculo en esas regiones se deberá dar en especial a través de la apertura de cuentas de ahorro más que por el mismo otorgamiento del crédito. Muestra de ello es el crecimiento de los Corresponsales No bancario, que hoy llegan a cerca de 23.269 con presencia en más de 400 municipios.
- Las tarifas deberán ser revaluadas y asignadas de acuerdo a una estructura de costos real y razonable para quienes suministran los recursos de efectivo al banco en calidad de cuentahabientes y para quienes acceden a los mismos en calidad de clientes de créditos de las distintas líneas o modalidades establecidas por el banco.
- Los recursos que han llegado al país a través de la inversión de bancos extranjeros, deberá verse reflejada en avances tecnológicos que permitan la disminución de los costos en las operaciones y en especial la rápida y eficiente atención que reduzca los niveles de quejas por la mala atención. Seguramente, con esta acción se podrá ir recuperando la confianza y borrando la mala imagen de los bancos en Colombia.
- Los bancos deberán promover la libre competencia y terminar de una vez por todas con la tasa máxima de usura, ya que en estas circunstancias es difícil incentivar la competencia y recudir el costo de las tarifas por la fuerza de la misma competencia.
- Se deben desarrollar alianzas estratégicas con el gobierno para facilitar el acceso al crédito a personas que nunca han tenido vínculo con la banca. Los programas de familias en acción, las líneas de crédito el Banco Agrario y el más reciente programa de financiación de 100.000 viviendas para los más pobres en Colombia, es muestra de que estas alianzas si se pueden estructurar y los beneficios están a la vista.
- Se deberá mejorar el nivel de alfabetismo financiero. Según análisis de entidades del sector; en especial del FOGAFÍN, el nivel de analfabetismo financiero de nuestra población llega al 95%. Se le debe enseñar a la gente a manejar los recursos propios, a ahorrar periódicamente, a programar su pensión, a prever situaciones futuras, a asegurar aspectos básicos de su economía y a conocer las distintas operaciones y movimientos que se desarrollan en el sistema financiero colombiano.

Solo con la materialización de estos aspectos se podrá lograr el bienestar de la población, el cual según la SFC se encuentra asociado con la cuantificación del efecto de los productos financieros y servicios sobre la calidad de vida de los habitantes y el impacto sobre la productividad de la sociedad.

#### CONLUSIONES

- La información sobre los distintos aspectos que se relacionan con los servicios financieros se ha venido constituyendo como un elemento estratégico respecto a las necesidades de los consumidores financieros y las políticas de inclusión al sistema financiero.
- La formalización de la economía de un país requiere entre otras, de unos resultados de profundización financiera que beneficie a la población en general y garantice que más personas tengan vínculo directo con el sistema financiero.
- La inclusión financiera, que se debe medir a través de ejes fundamentales como el acceso a los servicios, la calidad del servicio, el uso de los servicios y el bienestar que estos generan a la población, presenta en Colombia grandes retos por las deficiencias que existen en estos ejes relacionados.
- El problema de la profundización financiera no es exclusivo de países como Colombia. Este es un fenómeno que se presenta en el mundo entero y en especial en países de América latina y el Caribe.
- La banca colombiana deberá aprovechar la llegada de los competidores extranjeros para hacer de las economías de escala una realidad en la disminución de los elevados costos en los servicios que presta.

- El desarrollo tecnológico de la banca deberá ser una prioridad para los próximos años. Este desarrollo se deberá ver reflejado en una mayor eficiencia en la prestación de servicios, con lo cual se deberá mejorar la mala imagen que persiste en cierto porcentaje de la población colombiana.
- Los principales retos de la banca colombiana se concentran en: el acceso a los servicios, la calidad del servicio, el uso de los servicios y el bienestar que estos deberán generar a la población colombiana.
- La profundización financiera es una responsabilidad de la banca que deberá estar interpretada como una necesidad dentro de las políticas del gobierno central, de tal manera que banca y estado logren un mayor acceso de la población a los servicios financieros y se garantice la plena responsabilidad social de los protagonistas.

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#### RESUMEN

La economía mexicana durante las últimas décadas ha mostrado un comportamiento errático en la evolución de variables financieras, mientras que la aplicación de políticas monetarias no ha logrado controlar los efectos de los mercados financieros internacionales, ya que la globalización de estos mercados ha provocado una integración de las economías en este sentido, que más que garantizar beneficios, ha provocado inestabilidad en sus variables monetarias, principalmente en el comportamiento de su mercado de valores y en el valor internacional de su moneda. Por ello, a través de esta investigación de tipo documental, pero con el uso de una metodología cuantitativa (Vectores autoregresivos) se analizó la relación y efecto de las principales variables monetarias, utilizando series de datos mensuales durante 22 años (261 observaciones), donde se analiza el comportamiento del tipo de cambio (peso–dólar), del índice de precios y cotizaciones de la Bolsa Mexicana de Valores, el nivel de Reservas Internacionales de México, la Deuda Interna Mexicana y la Tasa de Interés en depósitos de ahorro, con el objetivo de describir los tipos de crisis financieras por las que ha pasado México durante estas dos décadas, además de realizar aportaciones en materia de política monetaria a manera de conclusión.

PALABRAS CLAVES: Crisis financieras, Vectores autoregresivos y Política monetaria.

**JEL**: E44, E47

## MEXICO'S FINANCIAL CRISIS: A SURVEY OF MONETARY VARIABLES (1990-2012)

During the last decades Mexican economy has shown an erratic behavior in the evolution of financial variables, while the implementation of monetary policies hasn't been able to control the effects of the international financial markets since the globalization of these markets has led to an integration of these economies, rather than guaranty benefits has led to an instability in the monetary variables, mainly in the behavior of its stock market and the international value of its currency. Therefore, through this documentary investigation, but using a quantitative methodology (self-regressive vectors) the relation and effect of the main monetary variables has been analyzed, using series of monthly data for 22 years (261 observations), where it was analyzed the behavior of the exchange rate (peso-dollar), price index and market rates of the Mexican Stock Exchange, Mexico's international Levels of Reserve, Mexican Internal Debt and the interest rate in savings deposits, with the purpose of describing the types of financial crisis that Mexico has suffered during the last two decades, furthermore to make contributions related to monetary policies as a way of conclusion.

KEY WORDS: Financial crisis, Self-regressive vectors and Monetary policy.

#### INTRODUCCIÓN

El presente trabajo de investigación documental pero con el enfoque de una metodología cuantitativa, específicamente a través del uso de la técnica de Vectores Autorregresivos (a partir de este momento VAR), analiza la situación económica de México a través de la evolución de sus principales variables financieras y monetarias, con el objetivo de describir su efecto en el resto de las variables y asociando a

su vez con el sector productivo de esta economía. En la sección de revisión literaria, se describen los argumentos de autores que han realizado investigaciones recientes en torno a este tópico, para comparar dichos resultados con los generados por la presente investigación. También se hicieron una serie de analogías entre los acontecimientos de Estados Unidos, en cuanto al comportamiento de ciertas variables financieras o económicas y el mismo tipo de variables pero para el caso de México.

En la sección de Metodología se explican las etapas y pruebas a las cuales fueron sometidas las series de tiempo de las variables monetarias utilizadas para la construcción del modelo VAR de primer orden (1 rezago), así como técnicamente, que es lo que se esperaba de la herramienta llamada función impulso – respuesta y como habría que interpretarse. A través de la sección de resultados, se vierten las interpretaciones de los principales indicadores generados, tratando de vincular con la situación financiera actual, para finalmente hacer una serie de aportaciones en materia de política monetaria, encaminadas a enfrentar la crisis financiera Mundial iniciada desde mediados del 2008 por Estados Unidos y que ha afectado a todo el Mundo.

#### **REVISIÓN LITERARIA**

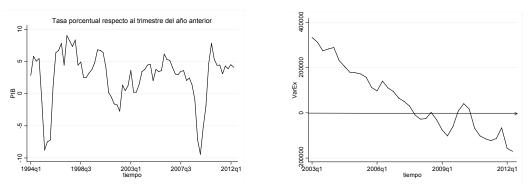
Uno de los argumentos más reiterativos en la bibliografía, tienen que ver con el hecho de que; El origen de la crisis se halla principalmente en el exceso de gasto y del endeudamiento por parte de los estadounidenses, estimulado por bajas tasas de interés (Zurita, 2009). Por lo que se puede decir, que el epicentro de esta crisis fue Estados Unidos, no obstante, sus efectos no fueron ajenos a los países latinoamericanos, sobre todo para México. Aparentemente la abundancia de liquidez promovida principalmente por las facilidades de crédito en los mercados internos y en el caso de los mercados externos por el exceso de liquidez financiado por países asiáticos, genero una situación de exceso de demanda ficticia de bienes inmuebles y activos financieros.

Desde mediados de 2005 y durante 2006 el alza en el costo del crédito comenzó a impactar en el mercado inmobiliario y el boom de los bienes y raíces comenzó a desinflarse. La cartera de los créditos subprime comenzó a crecer marcadamente. La baja de precios y las altas tasas de interés tuvieron como efecto que muchas personas cayeran en cartera vencida, en particular en el sector de los créditos hipotecarios llamados subprime (Zurita, 2009).La contracción en el nivel de actividad tuvo dos consecuencias de fundamental importancia para la economía real: la elevación en la tasa de desempleo y la caída en el ritmo de acumulación de capital físico y/o producción nacional (Albrieu, 2010). Sin embargo, el efecto indirecto tuvo repercusiones a nivel mundial, incluso en las economías sanas macroeconómicamente hablando, ya que la desconfianza en los mercados de valores de las economías del orbe. Los países afectados han sido aquellos que dependen, en mayor proporción, de las exportaciones golpeadas por caídas en sus precios. También se ven perjudicadas aquellas naciones que deben financiar déficit mayor o que están lejos de manejar políticas económicas sanas. Infortunadamente, la mayoría de los países latinoamericanos cumplen con las tres condiciones, y es por esto que la región se ha visto fuertemente afectada (Lapper, 1998, citado por Herrera, 2010).

Para el caso de México, el choque externo ha sido directamente en la actividad económica real, vía contracción de exportaciones e importaciones, así como en la reducción de remesas, ya que los efectos de mayor impacto estuvieron asociados con la sincronizada y profunda caída en el volumen del comercio internacional (Zurita, 2009). De igual forma, la economías latinas, no han tenido la capacidad de las Asiáticas para hacer frente a las variaciones en el precio internacional del dólar, sin embargo, hay que analizar las tendencias de las variables monetarias para determinar si su efectos son de corto o largo plazo y por ende si la capacidad macroeconómica de México, garantizará una recuperación solida y no solamente coyuntural. Por ello, se procedió a analizar la situación y tendencia de las siguientes variables económicas para el caso de México: La tasa de crecimiento de la producción nacional, a través de la tasa

de crecimiento porcentual del PIB a precios de 2003; El cambio porcentual en el valor del IPC de la Bolsa Mexicana de Valores; La tasa de inflación y de interés, así como la de desempleo, desde el año 2003 a la fecha, tratando de identificar patrones y tendencias similares a las de Estados Unidos antes de la crisis del 2008. Por ejemplo, en el caso del crecimiento del PIB mexicano, se puede apreciar que el efecto de la crisis fue aparentemente coyuntural, ya que para mediados de 2010, la economía mostro signos de crecimiento, no obstante desde finales de 2011, las tasas de crecimiento volvieron a caer y el comportamiento errático durante el año 2012, deja ver que los efectos de la crisis aún no desaparecen.

Figura 1: Tasa de Crecimiento del PIB de México (1994 – 2012) y Variación de Existencias (2003-2012)



Fuente: Construcción propia a partir de información estadística del Banco de Información Económica del INEGI (BIE). La Tasa de crecimiento porcentual fue calculada respecto al trimestre del año anterior y de acuerdo a valores del PIB a precios de 2003. Los puntos de quiebre más claros corresponden a los periodos del segundo trimestre de 1995 y primer trimestre del año 2009. La grafica de la derecha muestra la variación de existencia y la línea horizontal representa el equilibrio de mercado: Oferta igual a demanda, por lo que valores por debajo de la línea representan una situación de exceso de demanda.

En el caso de México, se puede observa en la Figura 1, que desde el tercer trimestre del año 2010, se encuentra en una situación de desequilibrio económico, es decir, la demanda es mayor que la oferta, esto considerando la variación de existencias, que es equivalente al diferencial entre la oferta o producción de bienes generada anualmente menos la utilización de bienes y servicios (demanda de bienes).

A pesar de la claridad con la que se percibe una situación de exceso de demanda en la economía mexicana, no se puede afirmar que esta, al igual que en Estados Unidos sea por un exceso de consumo, ya que esta situación de desequilibrio, también pudo ser generada por una caída en el sistema productivo del país, es decir una disminución en la oferta.

Tratando de reforzar la idea de este análisis, se asoció el comportamiento de desempleo y variación de existencias con el nivel de inflación en México, ya que hay que recordar que en el caso de México, la inflación es determinada en gran medida por el tipo de cambio o valor del dólar estadounidense. Lo anterior, cambiaria el escenario, ya que desde finales del 2008, el valor del dólar frente al peso mexicano se ha estado apreciando, generándose una devaluación del peso.En el caso del mercado financiero mexicano, a través de su principal índicador; el índice de precios y cotizaciones, el cual es capaz de absorver y detectar los problemas económicos y transferirlos al comportamiento de este indicador, se observó (graficas se incorporarón en la versión completa) que en los periodos de las mayores crisis económica de México, el mercado financiero se contrajo y el precio de sus acciones cayó, así como el volumen de activos operados en esos periodos de inestabilidad económica. Si se utilizará el mercado de valores como un termómetro de las condiciones económicas y expectativas de los agentes económicos, se puede indicar que actualmente o por lomenos para mediados del año 2012, las expectativas de los inversionistas y agentes económicos que intervienen en este mercado accionario, son buenas o con tendencia alcista, que las tasas de crecimiento mensual del IPC respecto al mes anterior, son positivas.

#### METODOLOGIA

El desarrollo metodológico de esta investigación se dividió en tres etapas. La primera de ellas, radica en la selección de las principales variables que expliquen el comportamiento del mercado financiero mexicano, asegurándose previamente de la aplicación de pruebas estadísticas de estacionalidad y autocorrelación. Así como de la conversión o preparación de las variables que lo ameriten, para su incorporación en el modelo y aseguran con ello, una explicación estadísticamente significativa. Dentro de la primera etapa se seleccionaron las siguientes variables que se relacionan entre sí en el mercado financiero y que por ende pueden explicar su efecto hacia el mercado de bienes. Esas variables son: 1. Tasa de interés de ahorro, 2. Tipo de cambio (peso – dólar), 3. Deuda Interna del Gobierno Federal Mexicano, 4. Reservas internacionales y 5. Índice de precios y cotizaciones de la Bolsa Mexicana de Valores. Las series de tiempo pueden presentar problemas de estacionalidad o raíz unitaria, por lo que se deben aplicar pruebas estadísticas que detecten esta situación y lo que es mejor, corregir dicho fenómeno para garantizar la capacidad explicativa de las variables.

En el caso de que se las variables: Tipo de cambio, deuda interna y tasas de interés de ahorro, se detectó problemas de estacionalidad, por lo que se procedió a corregir las series para garantizar su capacidad explicativa dentro del modelo VAR, por lo que se generaron tres nuevas variables derivadas de la primeras, a través del calculo de su primera diferencia. Después de este procedimiento estadístico, se procedió de nuevo a aplicar la prueba de cointegración a dichas variables.

La segunda etapa, consistió en determinar el rezago óptimo del modelo, que en esta ocasión se determinó a partir de la aplicación de la prueba de Granger y que de acuerdo a la misma se determino que un solo rezago es el óptimo. Por ello, el modelo VAR construido es de cinco bloques de vectores de ecuaciones. En una tercera etapa se procedió a analizar los resultados del modelo para poder hacer una serie de aportaciones en materia de política monetaria y asociando los mismos resultados con las expectativas de desarrollo económico en este panorama actual de crisis financiera mundial.

#### RESULTADOS

Los principales resultados de este proyecto de investigación, giran en torno a la información proporcionada por la técnica de función impulso – respuesta, al igual que las de causalidad de Granger, con las cuales se puede explicar mejor el efecto y magnitud que tienen cada una de las variables sobre el resto. La causalidad, como su nombre lo indica determina si una variable "causa" a otra, en este sentido el tipo de cambio, las reservas internacionales y la deuda interna, son las variables que muestran mayor grado de causalidad sobre el resto de las variables del modelo.

De acuerdo a los resultados arrojados por dicha función impulso – respuesta, (los cuales se muestran en la Figura 12 al final del documento) la deuda interna es capaz de generar incrementos en el tipo de cambio o devaluación en el peso respecto al dólar hasta en un 10%, con una duración de hasta de dos meses. Esta misma variable (deuda interna), tiene un efecto menor sobre la tasas de interés para ahorro (de casi el 5%), pero se mantiene su efecto en tiempo. Mientras que el caso de las reservas internacionales, se pueden incrementar casi en un 10% durante los primeros dos meses, después de un incremento porcentual de la deuda interna de acuerdo a los resultados del modelo.

El tipo de cambio, resulto ser una variable que causa incrementos en la variable de tasa de interés, lo que tiene sentido para la economía mexicana, ya que gran parte de las transacciones comerciales de este país se realizan en dólares y a su vez el costo relativo de las mercancías importadas (en dólares) determina de forma indirecta el costo del dinero o tasas de interés. No obstante, las tasas de interés no tienen la misma capacidad para fijar o impactar al resto de las variables analizadas, solamente en una pequeña medida se provocaría disminuciones en las tasas de interés en un muy corto plazo, ya que su efecto no se extendería por más de un mes. Finalmente, las reservas internacionales resultaron ser una variable con influencia sobre el tipo de cambio bancario. Ya que incrementos en las reservas internacionales, pueden llegar a

provocar una apreciación de la moneda mexicana o lo que es lo mismo, una disminución en el valor del dólar estadounidense.

#### CONCLUSIONES

La "deuda interna" resultó de acuerdo a este análisis la variable de mayor capacidad para causar efectos en el resto de las variables analizadas. Por ello, las instituciones encargadas de determinar el nivel de venta de cetes, que es el instrumento de deuda más importante del Gobierno Federal de México, deberán replantearse la posibilidad de una disminución en la venta de este instrumento o garantizar un nivel de oferta de cetes, que mantenga estables los niveles de deuda y a su vez, la estabilidad de las tasas de interés y el tipo de cambio. De igual forma, seguir fomentando la postura de ahorro nacional a través de incrementos en el nivel de reservas internacionales. En este caso, los esfuerzos de incrementar las reservas, no pueden dependen de las expectativas de incrementos en los precios del petróleo, ya que esta es una variable exógena. No obstante el gobierno Federal si puede canalizar sus esfuerzos en aumentar de forma sustentable la producción de petróleo que de igual forma, impacta en incrementos en las reservas internacionales y lo que es mejor, en una excedente de recursos públicos que puede ser canalizados a los Estados de México y contribuir a un mayor crecimiento económico.

No obstante, de acuerdo a las tendencias mostradas a mediados del 2012 y siguiendo los resultados del modelo construido en esta investigación, en México podría revertirse esta estabilidad, si no se contienen los problemas de desempleo, si no se incrementa la capacidad productiva del país y se controla el endeudamiento interno. En este sentido, de las variables que se estudiaron en el modelo y que pueden ser controladas por las instituciones gubernamentales y monetarias como en el caso del Banco de México, deberán canalizar sus esfuerzos a controlar la deuda vía cetes y aumentar las reservas internacionales. Si es necesario intervenir en el control del tipo de cambio a través de subasta de dólares, pero al mismo tiempo fomentar la reactivación de la economía en coordinación con programas de política fiscal.

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# GENERACIÓN DE CAPITAL SOCIAL A PARTIR DE LA EFICACIA, LA CULTURA Y EL APRENDIZAJE ORGANIZACIONAL. UN ESTUDIO CORRELACIONAL

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#### RESUMEN

En este trabajo se examinan tres indicadores del constructo capital social: la cultura organizacional considerada como el resultado de las relaciones sociales construidas a lo largo de la vida de la organización, las cuales influyen en la orientación de la gestión humana y el comportamiento organizacional; el aprendizaje organizacional entendido como el proceso de adquisición de competencias, que permite al individuo crear su propia realidad y su futuro para el logro de objetivos; así como la eficacia, concretada como la capacidad que tiene una persona, grupo u organización de obtener el mejor resultado en función de los recursos que dispone. Lo anterior, con el propósito de identificar si estos indicadores tienen efecto en la generación de capital social. El estudio empírico fue de tipo descriptivo, transversal y correlacional en 32 trabajadores de una Pyme de la industria metal mecánica fabricante de estructuras metálicas en la región centro de Coahuila. Los hallazgos del estudio revelan correlaciones estadísticamente significativas en los tres indicadores, así como el potencial de capital social subyacente.

PALABRAS CLAVE: Capital Social, Eficacia, Cultura Organizacional, Aprendizaje Organizacional.

# CAPITAL SOCIAL GENERATION FROM EFFECTIVENESS, ORGANIZATIONAL CULTURE AND LEARNING. A STUDY CORRELATIONAL

#### ABSTRACT

In this paper three indicators of social capital construct are examined: effectiveness, culture and learning organizational. The above, in order to identify whether these indicators have effect on the generation of social capital. The empirical study was descriptive, cross-sectional and correlational in 32 workers of SME metalworking industry manufacturer of metal structures in the central region of Coahuila. The findings of the study reveal statistically significant correlations in all three indicators, as well as the underlying social capital potential.

KEYWORDS: Social Capital, Effectiveness, Organizational Culture, Organizational Learning

JEL: A13, M14

#### INTRODUCCIÓN

El capital social se le considera como una capacidad que se encuentra en la red de relaciones de intercambio en curso que los individuos acumulan con el tiempo sin dejar de lado las normas y los valores (Coleman, 1988 y Putnam, 1995). Y como cualquier forma de capital, el capital social representa una fuente de valor potencial (Rodan y Galunic, 2004). La existencia de redes en la empresa reduce el tiempo y la inversión requeridos para obtener información (Kanter, 1988), promueve el aprendizaje

organizacional (Fisher y While, 2000), promueve la interacción entre las diferentes unidades de la empresa y la búsqueda de intereses comunes (Ghoshal y Nohria, 1993), y aumenta la eficacia de la empresa (Sandefur y Laumann, 1998; Cohen y Prusak, 2001).

El presente estudio tiene como objetivo identificar si los indicadores eficacia, cultura y aprendizaje organizacional de una empresa de la industria metalmecánica fabricante de estructuras metálicas en la región centro de Coahuila, tienen efecto en la generación de capital social. Los resultados obtenidos contribuyen a la literatura sobre eficacia, cultura y aprendizaje organizacional, así como sobre el capital social, pues ponen de manifiesto empíricamente la naturaleza del capital social, con el propósito de apoyar a las empresas a que se conozcan a si mismas e identificar sus potencialidades respecto al valor del capital social. La investigación está organizada de la siguiente manera. En el apartado de revisión literaria, se desarrollan los fundamentos teóricos del capital social, eficacia, cultura y aprendizaje organizacional. El siguiente apartado recoge los aspectos metodológicos, finalmente se presentan los resultados y conclusiones desprendidas del trabajo de investigación, así como las futuras líneas de investigación.

#### **REVISIÓN LITERARIA**

El capital social es culturalmente construido, que se explica como una capacidad para trabajar mediante una red de relaciones de colaboración, caracterizadas por la ayuda mutua, confianza, costumbres, credibilidad y compromiso con ciertas creencias tras un objetivo compartido, sobre bases de equidad y lazos de reciprocidad que perduran en el tiempo (Arboleda et al, 2008). Todas las empresas poseen, capital social (Guía, 2000; Leana y Pil, 2006), definido en términos de distribución y contenido de las relaciones entre los grupos e individuos dentro la empresa (áreas, departamentos, trabajadores, directivos, etc.), que les permite actuar de forma más eficaz en las relaciones internas y con su entorno de trabajo inmediato. Las empresas cuya red interna esté altamente cohesionada podría disfrutar de ciertas ventajas en la coordinación y ejecución de actividades complejas que realizan los diferentes grupos e individuos que las conforma (Coleman, 1988, 1990). Para la empresa, como agente social colectivo, este capital es un activo privado del cual es propietario y por tanto, los beneficios derivados de su posesión influye directamente en su eficacia empresarial (Nahapiet y Ghoshal, 1998).

En ese sentido (Fernández y Sánchez, 1997) señalan que la eficacia organizacional hace referencia a los recursos empleados y los resultados obtenidos. Es una capacidad valorada por empresas, debido a que en la práctica todo lo que éstas hacen tiene como propósito alcanzar sus objetivos, sin incapacitar sus recursos. Y esto se da cuando se establece una relación de apoyo y solidaridad entre los trabajadores de una organización o empresa los cual permite generar capital social.(Blasco et al, 2010) mencionan que para una empresa, la utilización del capital social implicará un beneficio directo entre los recursos organizativos, aprovechamiento de sinergias entre sus componentes (grupos e individuos), mayor eficacia y eficiencia en la coordinación y control de las acciones colectivas internas. Dichos beneficios podrían reflejarse en términos de aumento de los resultados de la empresa, mejora del clima laboral, etc. En relación a esto (Echebarria, 2001) indica que el capital social sería una forma de cultura organizativa que fomenta la confianza y la cooperación entre los miembros de la organización, promoviendo relaciones más fluidas de intercambio y coordinación.

Por otro lado, y para este estudio se adopta a (García et al, 2006), quienes definen la cultura organizacional como el resultado de las relaciones sociales construidas a lo largo de la vida de la organización, en las que se destacan aspectos tangibles e intangibles que influyen en el direccionamiento de la gestión humana y del comportamiento organizacional.En ese sentido, lo importante del capital social para los individuos y los grupos que lo poseen es la potencialidad que les confiere y de la que carece el individuo aislado. Representa la capacidad de obtener beneficios a partir del aprovechamiento de redes sociales tanto verticales como horizontales. La existencia de estas redes promueve el aprendizaje

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organizacional (Fisher y While, 2000) brindando ventajas adicionales a los individuos que tienen acceso a ellas, en comparación con las que obtendrían si actuaran individualmente y sin el apoyo de esas relaciones sociales (Flores y Rello, 2001). Ya que parte del proceso de aprendizaje organizacional se da en los individuos (como es el caso de esta empresa en estudio) que al interrelacionarse y acumularse pasan a formar parte del capital social. Y esto se logra cuando el conocimiento individual y vivencial se codifica y se logra socializar en una empresa, desarrollando capacidades y habilidades en las personas y en las organizaciones que les permite responder a las oportunidades y los desafíos que el nuevo entorno brinda (Chaparro, 2003). Se entiende aprendizaje organizacional individual como el proceso de adquisición de competencias que permite al individuo crear su propia realidad y su futuro, aprender es incorporar nuevas habilidades que posibilitan lograr objetivos, que hasta ahora se encontraban fuera del alcance (Senge, 2005). En resumen, considerando lo anteriormente expuesto el aprendizaje organizacional, ocurre cuando la cultura organizacional define procesos que facilitan el desarrollo de las destrezas basadas en aptitudes y características personales, constituyendo patrones de aprendizaje que dan origen a formas culturales mas fuertes que diferencian las formas de vida de la empresa (Cajiao y Arenas, 2003)

#### METODOLOGÍA

El estudio empírico se llevó a cabo en una empresa de la industria metalmecánica fabricante de estructuras metálicas en la región centro de Coahuila, la cual fue inaugurada en 1934 en la ciudad de Monclova, Coahuila como una empresa familiar perteneciente al ramo de la industria metalmecánica. En sus inicios se dedicó a la fabricación de estructuras metálicas sencillas como puertas y ventanas para viviendas, actualmente su giro es industrial y las estructuras que fabrica son tanques, tuberías y puertas para prisiones los cuales son distribuidos en el mercado nacional e internacional.

El estudio comprendió datos de corte transversal de enero a marzo del año 2012, recopilados mediante un cuestionario estructurado. El cuestionario fue entregado personalmente a los 32 trabajadores que representan el total de los empleados de la empresa en estudio y fue contestado en el momento para aclarar posibles dudas, con la finalidad de garantizar la confiabilidad de las respuestas. Para el análisis de los datos se utilizó el software estadístico SPSS (17.0). Se realizó un análisis de estadística descriptiva con la finalidad de los indicadores del capital social y para verificar la asociación de los indicadores del cuestionario se utilizó el análisis de correlación de Spearman.

Concretamente todas las preguntas de los indicadores fueron medidas cuantitativamente mediante una escala tipo Likert de cinco puntos. La cultura organizativa se evaluó mediante cuatro ítems: conciencia de equipo, cohesión, orientación a la consecución de objetivos y coordinación para alcanzar los objetivos. El aprendizaje fue evaluado con cuatro ítems, en que los encuestados señalaron si tienen suficientes conocimientos para abordar con éxito su trabajo, preocupación por estar actualizados, oportunidades de formación y capacitación instrumental (idiomas, TICs, etc) y para la eficacia organizacional se pidió a los respondientes que señalaran en tres ítems si la empresa es eficaz y eficiente.

#### RESULTADOS

Las aportaciones de este estudio consisten en dar a conocer algunos aspectos de las relaciones sociales de los trabajadores de una empresa de la industria metal mecánica y su influencia en la consecución de los objetivos perseguidos por las organizaciones. Estas aportaciones y de acuerdo a la literatura se fundamentan en el concepto denominado capital social de las organizaciones, es decir en sus recursos humanos, que se plantea como el fundamento más importante en la competitividad de las empresas (Chamorro y Tato, 2005). 32 trabajadores respondieron las preguntas del cuestionario diseñado en una escala tipo Likert. El nivel de eficacia de las personas que configuran la empresa fue la primera variable a evaluar en la encuesta realizada, con un total de 4 afirmaciones. La Tabla 1, muestra que el 43.8% de los trabajadores calificó la eficacia con puntuaciones de 5 y 4 (totalmente y bastante de acuerdo) por lo que

se puede apreciar que una gran mayoría de los trabajadores perciben que se cumplen los objetivos establecidos y que los profesionales de la empresa son efectivos; sin embargo el 45.9% calificó con una puntuación de 3(ni de acuerdo ni en desacuerdo), y sólo el 10.4% con puntuaciones de 2 y 1.

Tabla 1: Calificación de la Eficacia Organizacional.

Escala de Likert (n=32)		%
1	Totalmente en desacuerdo	1.0
2	Bastante en desacuerdo	9.4
3	Ni de acuerdo ni en desacuerdo	45.9
4	Bastante de acuerdo	37.5
5	Totalmente de acuerdo	6.3

Esta Tabla muestra el grado de acuerdo que los trabajadores otorgaron al indicador de eficiencia, en ella se aprecia que la mayoría presenta un grado de indiferencia, sin embargo otra gran parte sí percibe que la empresa es eficaz y eficiente.

La cultura organizacional fue medida en segunda instancia en la encuesta. En este indicador los datos revelan que la empresa evaluada está bien posicionada en conciencia de equipo con un 50% de aceptación, un 40% en el grado de cohesión, un 50% en orientación a la consecución de objetivos y un 41% en la coordinación de objetivos. Es general, un 46.1% de los trabajadores calificó a la cultura organizacional con puntuaciones de 5 y 4 (totalmente y bastante de acuerdo), el 30.2% con una puntuación de 3, y el 23.8% con puntuaciones de 2 y 1 (Tabla 2). Por lo que se puede decir que en esta empresa existe una buena cultura organizacional que ayuda a promover la creación de capital social y bienes socioemocionales, además de considerársele como una fuente de ventaja competitiva (Robinson y Siles, 2003; Gregory et al., 2009).

Tabla 2: Calificación de la Cultura Organizacional

Escala de	Likert (n=32)	%
1	Totalmente en desacuerdo	3.2
2	Bastante en desacuerdo	20.6
3	Ni de acuerdo ni en desacuerdo	30.2
4	Bastante de acuerdo	37.3
5	Totalmente de acuerdo	8.8

Esta Tabla presenta el grado de acuerdo que los trabajadores otorgaron al indicador de cultura organizacional, en la que se observa que la percepción generalizada es de que en la empresa existe una buena cultura organizacional.

Y para el aprendizaje organizacional, el 73.9% la calificó con puntuaciones de 5 y 4 (totalmente y bastante de acuerdo), el 15.0% con una puntuación de 3, y el 13.1% con puntuaciones de 2 y 1 (Tabla 3). Por los resultados obtenidos, se aprecia que en la empresa existen buenas actitudes para desarrollar y fomentar el aprendizaje organizacional, las cuales son armas estratégicas al servicio de las organizaciones (Garzón y Fischer, 2010).

Tabla 3: Calificación del Aprendizaje Organizacional.

Escala de	Likert (n=32)	%
1	Totalmente en desacuerdo	2.4
2	Bastante en desacuerdo	10.7
3	Ni de acuerdo ni en desacuerdo	15.0
4	Bastante de acuerdo	58.9
5	Totalmente de acuerdo	15.0

Esta Tabla presenta el grado de acuerdo que los trabajadores otorgaron al indicador de aprendizaje organizacional, en la que se observa que la percepción generalizada es de que en la empresa existe buenos procesos para que se de el aprendizaje organizacional.

Por último en la Tabla 6 se presenta un análisis de correlación de Spearman entre los indicadores estudiados, en ella se muestra las magnitudes de correlación estadísticamente significativas a un nivel de 0.01. Todos los indicadores muestran magnitudes de correlación moderada.

	Indicador	Cultura organizacional	Aprendizaje organizacional	Eficacia
Spearman's rho	Cultura organizacional	1		
	Aprendizaje organizacional	.658**	1	
	Eficacia organizacional	.779**	.668**	1

Tabla 6: Correlación Significativa de los Indicadores Eficacia, Cultura y Aprendizaje Organizacional.

\*\*. La correlación es significativa al nivel 0.01 (bilateral). La tabla presenta los valores de correlación Rho de Spearman entre los indicadores del capital social. Se aprecia que la correlación más fuerte se da entre la cultura organizacional y la eficacia.

Con los datos anteriores se puede decir que a mediana cultura organizacional, probablemente mediano aprendizaje y eficacia organizacional; y a mediano aprendizaje organizacional, probablemente mediana eficacia organizacional.

#### CONCLUSIONES

El estudio correlacional realizado nos confirma que los indicadores del capital social: eficacia, cultura y aprendizaje organizacional están significativamente correlacionados. Una vez reconocido el valor de la noción capital social como componente de los indicadores estudiados, se analiza su trascendencia. A nivel indicador, una empresa que cultive las relaciones sociales, es decir, que tenga una buena cultura organizacional, provoca que los trabajadores de su empresa perciban un ambiente propicio para el aprendizaje que redunde en la eficacia organizacional. Con respecto al aprendizaje organizacional los resultados sugieren que los trabajadores al tener más capacidades laborales permitirán obtener mejores resultados para que la empresa sea más eficaz y eficiente. Por lo que se puede concluir que dichos indicadores tienen efecto en la generación de capital social en la empresa de estudio.

Se propone que la eficacia de las empresas está directamente asociada a que se desarrolle cotidianamente las siguientes prácticas de la cultura organizacional: Capacidad para fomentar la cohesión entre los trabajadores, capacidad para orientarse a la consecución de los objetivos organizacionales, capacidad de coordinación para alcanzar los objetivos organizacionales y motivación e incentivación para que los profesionales de la empresa sean efectivos. Lo anterior, abre un frente de investigación en el que los indicadores: eficiencia, cultura y aprendizaje organizacional, identificados y detallados deben ser sujetos a prueba en otras poblaciones y contextos para acumular evidencia de su contribución a la generación de capital social en nuestras empresas.

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# LA CONTABILIDAD MEDIO AMBIENTAL Y LOS IMPUESTOS AMBIENTALES APLICADOS EN LAS PYMES: CASO EMPRESAS AGRÍCOLAS DEL VALLE DE AUTLÁN JALISCO, MÉXICO

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#### RESUMEN

En la actualidad las empresas son valoradas desde el aspecto financiero, sin embargo, existe la necesidad de medir el impacto al medio ambiente en que se desempeñan. En general las empresas realizan costos y gastos que permanecen ocultos, la contabilidad ambiental permite contrarrestar sus efectos con el medioambiente, conocer y evaluar su actuación ambiental. Desde la perspectiva agroecológica y partiendo de la noción de sustentabilidad surge el cuestionamiento de las prácticas agrícolas que se desarrollan en regiones particulares, como es el caso de las pequeñas y medianas empresas establecidas en el Valle de Autlán, Jalisco, México, siendo innegable la importancia que tiene el sector agrícola dentro de las economías nacionales y territoriales y de forma paralela la conservación del medio ambiente, de ahí la importancia de realizar un diagnóstico que permita determinar los costos destinados al daño y cuidado del medio ambiente y los beneficios fiscales aplicables a las empresas que sean socialmente responsables.

PALABRAS CLAVE: Contabilidad Ambiental, Impuestos ambientales, Actividades Agrícolas.

#### INTRODUCCIÓN

Cuando en 1972 los problemas ambientales fueron expuestos a la opinión pública y marcados como una prioridad a resolver por parte del Poder Público, en la Conferencia sobre el Hombre y el Medio Ambiente, conocida como la Conferencia de Estocolmo, el estudio tanto del medio ambiente en sí mismo como de sus recursos naturales fue imparable. Las ciencias sociales empezaron una tarea investigadora desde sus diversas disciplinas; diversos mecanismos e instrumentos jurídicos han sido propuestos para llevar a cabo los objetivos y fines de las políticas ambientales, siendo obligado un trabajo multidisciplinario que pueda ofrecer resultados y soluciones viables a la problemática ambiental (Figueroa, 2000).

En las últimas décadas la preocupación por la destrucción de los hábitats y la degradación de los recursos naturales, la contaminación, la sobre-explotación de los recursos naturales y la protección del medio ambiente ha venido a disminuir la calidad del medio ambiente, obligando a los Estados a prestar especial atención, siendo el vínculo entre desarrollo, política económica y medio ambiente.Es preocupación de los gobiernos, de organizaciones civiles y de la sociedad en su conjunto, la reparación de daños ambientales para procurar su preservación, y que la sociedad pueda seguir siendo beneficiada con la utilización de estos recursos.En la siguiente investigación tiene como objetivo medir el impacto al medio ambiente en que se desempeñan las pequeñas y medianas empresas agrícolas establecidas en el Valle de Autlán, Jalisco, México, mediante la aplicación de la contabilidad medio ambiental y de los impuestos ambientales.

### **REVISIÓN LITERARIA**

Con base a la Comisión Mundial para el Medio Ambiente y el Desarrollo, establecida por las Naciones Unidas en 1983, una de las preocupaciones más importantes de nuestro tiempo es la calidad del entorno

como es el aire, el agua, la tierra y su biodiversidad: las empresas deben producir bienes sin perder de vista el medio ambiente, esto implica pasar de un desarrollo basado en el crecimiento económico a uno en donde se establecen estrechas vinculaciones entre aspectos económicos, sociales y ambientales, capaz de aprovechar las oportunidades que supone avanzar simultáneamente en estos tres ámbitos, sin que el avance de uno signifique ir en deterioro del otro (Division for Sustainable Development, 2009). En los últimos años se ha presentado una sensibilidad especial respecto al tema del cuidado del entorno natural y el ambiente; todo esto como consecuencia de los problemas generados por los desechos de las industrias en su proceso productivo, y que desde el siglo pasado, ha provocado innumerables pérdidas naturales y grandes riesgos a la salud y calidad de vida en la población (Reinosa, 2009).

La información contable debe reflejar la realidad económica y ésta se ve afectada por los impactos en el medio ambiente, los cuales deberán tasarse para dar una información útil para la toma de decisiones. (Pahlem, 1997). La contabilidad está sufriendo una continua transformación para poder satisfacer estas nuevas exigencias del entorno empresarial, que demanda a la organización un desempeño respetuoso con el medio ambiente (De la Rosa, 2005) Referente a la problemática medio ambiental que tiene la región, esta obedece a las explotaciones agrícolas que se dan a consecuencia de este tipo de este tipo de cultivos. El Valle de Autlán es un área importante para el análisis de la agricultura principalmente por dos razones: La agricultura es una actividad central en la economía regional y ha sido uno de los factores más significativos de cambio ambiental en el último medio siglo en la región, debido a la deforestación, tecnologías agrícolas mal utilizadas, uso excesivo de agroquímicos, pesticidas, contaminación por materia orgánica, desechos industriales, contaminación atmosférica por quemas agrícolas y el uso intensivo de maquinaria agrícola. (Jardel, 2000). Este impacto ambiental se presenta de forma indirecta por las actividades agrícolas debido a una falta de cultura ambiental y en un problema de salud pública.

(Gómez, 2012)Su efecto acumulado reviste ya la gravedad suficiente como para que el hombre no sólo haya tomado conciencia del problema, sino que además trate de buscar soluciones concretas. La sociedad actual reclama la implicación de todos los agentes económicos en la adopción de las medidas que eviten un mayor deterioro del medio ambiente. Entre ellos se encuentran las empresas, sus gestores y los profesionales de la contabilidad. La contabilidad ha seguido, con respecto a la cuestión ecológica, la misma senda que la economía establecida: el impacto medioambiental de las actividades productivas permanece fuera de los cálculos de las empresas que no lo incorporan a su función de producción de bienes y servicios, y queda como un problema macroeconómico a resolver por el conjunto de la sociedad. De ahí la necesidad en la actualidad de buscar alternativas para lograr internalizar las externalidades empresariales y su reflejo en la información contable (Pelegrin, Reyes, & Campos, 2010).

La contabilidad tiene un importante lugar en el proceso de mejorar la gestión ambiental, debido a que constituye la base para la toma de decisiones gerenciales, y lo que es importante ayuda a definir y medir el éxito de las acciones emprendidas por las organizaciones (Gray, Bebbinton, & Walters, 1999).En la actualidad las empresas comienzan a considerar la variable ambiental en su proceso de toma de decisiones, implantando medidas que prevengan el impacto ambiental de sus actividades o que corrijan los daños generados. De este modo, la empresa está soportando un coste derivado de su interacción con el medio ambiente, lo que se denomina coste medio-ambiental (Bonilla, 2000).

#### Contabilidad Ambiental

La Contabilidad Ambiental hace su aparición en la década de los sesenta, en año 1972 el informe Meadows a las Naciones Unidas, planteó el problema al crecimiento y con ello se iniciaron medidas políticas y económicas, tanto a nivel micro como a nivel macro y conjuntamente las primeras reflexiones respecto a la participación de la contabilidad en la problemática ambiental (Quinche, 2008).Desde entonces y hasta la fecha se han ido incorporando diferentes disciplinas del conocimiento, adaptándose cada una a las necesidades de cuidado y defensa del medio ambiente, y en varios años autores han generado diferentes conceptos de contabilidad ambiental:

Tabla 1: Conceptos de contabilidad	ambiental
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Autor Ensuncho 1995 económica, pero ec		Concepto entre la contabilidad del balance social y la contabilidad del recurso humano, con perspectiva o los recursos sociales en el interior y exterior de la empresa
Carlos Larrinaga	1997	identificar y medir la contribución social de la empresa, incluyendo las externalidades.
Ludevid y Echavarría	1999	sistemas e instrumentos útiles para medir, evaluar y comunicar la actuación ambiental de la empresa.
Gray y Bebbingtong	2007	emitir información contable de las actividades medioambientales en una empresa.
Mogollón y Vergara	2007	información financiera y no financiera destinada a integrar políticas económica-ambientales para construir una empresa sostenible.
Luisa Fronti y Mariano Moneva	2008	proveer información de aspectos medioambientales en la empresa.
Carlos Larrinaga	2009	brinda información de tipo cuantitativa asociada a activos, pasivos y contingencias medioambientales.
Antonio Llull Gilet	2010	información del recurso ambiental de manera tal que pueda ser percibida por clientes y competidores.
Pablo Alian Lamorú Torres	2011	información sobre el impacto financiero de aspectos medioambientales a través de las cuentas auditadas, y de la actuación medioambiental de la empresa, relacionadas con activos, pasivos, capital, gastos, ingresos e inversiones medioambientales
Monzerrat 2012 Vera		información cuantitativa de ciertos eventos económicos y medioambientales identificables y cuantificables con objeto de evidenciar la acción de la empresa a favor del medio ambiente y facilitar la toma de <u>Decisiones</u>

La Tabla 1 muestra los diferentes conceptos de contabilidad ambiental desde varios autores.

Por lo que se concluye a la contabilidad ambiental como el sistema de información que permite determinar el costo beneficio de la actuación de la empresa con respecto al medio ambiente.La actuación ambiental se define como los resultados de la gestión que la empresa realiza de sus aspectos ambientales. (Ludevid, 1999) Términos empleados en la Contabilidad Ambiental

Actividades ambientales: Tienen como objetivo principal prevenir, reducir o reparar el daño al medio ambiente.

*Activos ambientales:* Aquellos bienes que son incorporados al patrimonio de la entidad de forma duradera con la finalidad de reducir o controlar el impacto ambiental.

*Pasivos ambientales*: Son estimados y no se conoce con claridad al reclamante, ya que puede ser cualquier persona que se vea afectada por las actividades de la entidad.

*Capital natural:* Es muy difícil asignarle un valor a los recursos naturales, los cuales no tienen precio en el mercado

*Costos y Gastos relacionados con medidas ambientales:* Son los gastos de las actividades medioambientales realizadas de las operaciones de la empresa, así como los derivados de los compromisos medioambientales de la misma (Ablan y Méndez, 2004; Déniz, 2007). Algunas partidas de *Gastos Relacionados con medidas ambientales:* 

De inversión de capital en partidas ambientales.

De investigación y desarrollo para medidas ambientales.

De administración y planeación ambiental.

De monitoreo del cumplimiento de las regulaciones ambientales.

De restauración al medio ambiente.

De personal dedicados a actividades medioambientales.

La amortización de activos medioambientales.

Los gastos financieros derivados de la adquisición de activos medioambientales.

#### Impuestos Ambientales

Los tributos con fines de protección ambiental se han incorporado en la mayoría de los ordenamientos jurídico-fiscales de países con una sólida política y legislación ambiental. En las últimas dos décadas, la mayoría de los países europeos de la OCDE introdujeron nuevos impuestos y modificaron algunos existentes con el fin de alcanzar objetivos ambientales. Este tipo de impuestos fueron llamados en su conjunto impuestos ambientales o impuestos verdes, por su doble objetivo de generar recaudación a partir de lo que la sociedad considera males ambientales, en contraposición a recaudar a partir de tasar bienes, y de modificar las señales económicas que reciben individuos y empresas sobre los costos ambientales de sus acciones.Las reformas fiscales ambientales en los países miembros de la OCDE se han caracterizado por ser neutrales en la recaudación. En términos generales, su instrumentación consiste en la introducción de nuevos cargos o impuestos ambientales y la eliminación o disminución de otros impuestos. En algunos casos a cambio de la creación de impuestos ambientales se han disminuido impuestos sobre la renta o sobre el trabajo.En otros países estos recursos se canalizan a la inversión en ahorro energético o a la disminución de impuestos que afectan a la industria.

La recaudación en éstos países por concepto de impuestos ambientales oscila entre el 1 y el 4.5% del PIB y su mayor proporción se encuentra en los impuestos a combustibles para transporte e impuestos sobre vehículos.El diseño y aplicación de impuestos ambientales se ha expandido en los últimos quince años en los países miembros de la OCDE. En los años setenta los instrumentos económicos se utilizaban de manera ocasional, los casos más significativos son los sistemas de gestión del agua en Francia y Holanda. A continuación se presenta la evolución de los impuestos ambientales en los países miembros de la OCDE, dividida en tres fases:

#### Primera Fase

*FINLANDIA*: Creó por primera vez un impuesto al carbón, disminuyó además el impuesto sobre la renta y las contribuciones al seguro social.

*NORUEGA:* En 1991 se instituyó un impuesto al CO<sub>2</sub>, que se amplía progresivamente hasta cubrir el 64% de las emisiones de este gas. Como medida complementaria, se aplico una disminución al impuesto sobre la renta.

*SUECI:* Se realizó una reforma fiscal ambiental en 1991. Los impuestos al CO2, al azufre y a los NOx se traducen en una reducción significativa del impuesto sobre la renta.

*DINAMARCA:* En 1992 se aprobaron impuestos al carbón en los combustibles, (1995-2002) y otros impuestos verdes, Todos ellos con destino específico

*PAÍSES BAJOS*: En 1998 se emitió el "Decreto General de Protección Ambiental" donde algunos cargos se convirtieron en impuestos con destino específico a excepción del cobro del agua. Entre los años 1992 - 2001 se llevó a cabo la Reforma Fiscal Ambiental. En 1996 se aplicó un impuesto energético a los pequeños usuarios y otros impuestos verdes; a cambio se redujo el impuesto sobre la renta y las contribuciones al seguro social.

#### Segunda Fase

*FRANCIA:* En 1999 se inició la reforma fiscal ambiental que sustituye derechos por impuestos con destino específico (excepto derechos de uso de agua). Se decretaron impuestos de energía a la industria, mismos que fueron rechazados por el Congreso en el 2000. El futuro de la reforma fiscal ambiental en Francia es incierto.

*ALEMANIA:* Inició su reforma fiscal ambiental en 1999; incrementó los impuestos a combustibles minerales, fósiles y electricidad y redujo las contribuciones al seguro social.

*ITALIA.*: Su reforma fiscal ambiental abarca de 1999 al año 2005. Se reestructuraron los impuestos a los minerales y combustibles fósiles. Se incrementaron los impuestos a la gasolina, diesel, carbón, aceites, gas y actualmente está en proceso una reducción a los impuestos al trabajo.

*REINO UNIDO:* En 1997 se estableció un impuesto a los combustibles para el transporte que ha tenido un incremento real del 3-6%. En abril de 2001 se decretó un pago de cargos por concepto de cambio climático (uso comercial de la energía). Actualmente existe otro impuesto relacionado con el medio ambiente que es el impuesto a basureros (1996). Se redujo la contribución de los trabajadores al seguro social.

#### Tercera Fase

En Europa se discute la creación de un impuesto al CO<sub>2</sub>. En 1991 la propuesta fue rechazada por el Consejo de la Unión Europea. En 1997 se hizo un nuevo intento para determinar tasas mínimas de impuestos. En esta iniciativa se establece la inclusión de todos los productos energéticos, por lo que se eliminan las exenciones y, además, como consecuencia de esto, en algunos países se elevaría la tasa mínima de la carga fiscal. Durante el año 2000 se presentó un documento que propone la comercialización de emisiones. En el 2001 se habla de "inducir a la cooperación" pero hasta la fecha no se han logrado acuerdos.El presidente de Francia, Nicolás Sarkozy, reforzó su pedido de que se establezca un impuesto al dióxido de carbono (CO<sub>2</sub>) a nivel de la Unión Europea y se impongan aranceles punitivos para proteger el clima.

#### Ventajas De Los Impuestos Ambientales

Costo efectividad (eficiencia estática) Los impuestos, derechos o cargos permiten alcanzar los objetivos planteados de la manera menos costosa (más costo-efectiva). En términos técnicos, esto se logra al igualar el cargo o impuesto con los costos marginales de abatimiento. De igual manera, es posible alcanzar los objetivos mediante

*Ajuste automático:* Los niveles de emisión se ajustan automáticamente al impuesto (o precio): aquellos que contaminan disminuyen sus emisiones hasta que el costo marginal de abatir iguala el impuesto. Por encima de este punto, es más económico pagar el impuesto que abatir.

*Internalización de externalidades:* Aquellos que contaminan son quienes deben pagar los impuestos, cargos y permisos a fin de que sus decisiones particulares consideren los costos generados. De esta manera, se apropian del daño que generan para el resto de la sociedad.

*Generación de beneficios ambientales y económicos:* Por un lado, los impuestos ambientales generan ingresos que pueden tener un destino específico para la conservación o el mantenimiento de los recursos naturales, al tiempo que inciden en el comportamiento y crean incentivos para disminuir el impacto negativo sobre el entorno ambiental.

*Integración del aspecto ambiental en las políticas sectoriales:* Dado que la política fiscal permea al conjunto de la economía, mediante el cobro de impuestos ambientales se incorporan automáticamente a todos los sectores los costos que generan aquellos que contaminan.

#### Instrumentos Económicos En México

En México, la Ley General del Equilibrio Ecológico y la Protección al Medio Ambiente faculta a La Federación, los Estados y el Distrito Federal, en el ámbito de sus respectivas competencias a diseñar, desarrollar y aplicar instrumentos económicos que incentiven el cumplimiento de los objetivos de la política ambiental. (Artículo 21) En el Artículo 22 de esta ley se señala que los instrumentos económicos son los mecanismos normativos y administrativos de carácter fiscal, financiero o de mercado, mediante los cuales las personas asumen los beneficios y costos ambientales que generen sus actividades económicos de carácter fiscal, los estímulos fiscales que incentiven el cumplimiento de los objetivos de la política ambiental. En ningún caso, estos instrumentos se establecerán con fines exclusivamente recaudatorios. En la legislación mexicana existen tres opciones claras de instrumentos fiscales que se deben utilizar para alcanzar objetivos ambientales: derechos, impuestos y aprovechamientos, siendo el instrumento más importante los impuestos.

*Impuestos:* conforme a lo establecido en el Código Fiscal de la Federación en su Artículo 2°, son las contribuciones establecidas en la Ley que deben pagar las personas físicas y morales que se encuentren en la situación jurídica o de hecho prevista por la misma y que son distintas de las señaladas en las fracciones II, III y IV (Aportaciones de seguridad social, Contribuciones de mejoras, y Derechos). En esta definición se señala que es indispensable el cumplimiento con el Principio de Legalidad, es decir, deben estar establecidos en una ley, como se señala en la fracción IV del Artículo 31 de la Constitución Política de los Estados Unidos Mexicanos que a la letra dice:

*"Artículo 31: Son obligaciones de los mexicanos: ... IV. Contribuir para los gastos públicos, así de la Federación, como del Distrito Federal o del Estado y Municipio en que residan, de la manera proporcional y equitativa que dispongan las leyes."* Continuando con lo que señala el Artículo 2º del Código citado, es importante señalar las siguientes contribuciones:

*Derechos:* como lo indica la fracción IV del Código Fiscal de la Federación, son las contribuciones establecidas en Ley por el uso o aprovechamiento de los bienes del dominio público de la Nación, así como por recibir servicios que presta el Estado en sus funciones de derecho público. En este caso, la contribución se vincula a dos supuestos: al uso o aprovechamiento de un bien, o a una prestación que da el Estado. En el caso del cobro de derechos, lo que se persigue es que el uso, aprovechamiento o explotación de los recursos naturales se pague, es decir, que con esta medida se controle la demanda del recurso para su conservación o se pague por la contaminación y deterioro que se hace del mismo para poder invertirlo en su cuidado y regeneración. Los derechos se encuentran contemplados en la Ley Federal de Derechos en los Títulos I y II. Los derechos establecidos en el Título II están dirigidos al

hecho generador que es el uso y aprovechamiento de bienes de dominio público. Entre este tipo de derechos se encuentra el de la Zona Federal Marítimo Terrestre, y el cobro por el uso y aprovechamiento de los elementos marinos en áreas naturales protegidas. Es importante señalar que en Título II se establecen los costos que hay que pagar por el uso de estos bienes públicos. Para poder establecer estos costos es necesaria la valuación económica. Actualmente, no existe una metodología establecida por Ley para hacer este tipo de valuación que pueda determinar el costo real que, a su vez, refleje al deterioro de estos bienes por el uso que hacemos del mismo.

Aprovechamientos: El artículo 3° del mismo Código se establece que "son aprovechamientos los ingresos que percibe el Estado por funciones de derecho público distintos de las contribuciones, de los ingresos derivados de financiamientos y de los que obtengan los organismos descentralizados y las empresas de participación estatal." La Ley de Ingresos de la Federación en su Artículo 1 señala una lista de aprovechamientos entre los cuales se encuentran: multas, indemnizaciones, reintegros, cuotas compensatorias.

#### Beneficios Fiscales

A continuación se presentan algunos beneficios fiscales referentes al cuidado del medio ambiente que se encuentran en la legislación fiscal mexicana, entre los cuales se pueden citar los siguientes:

Ley del Impuesto sobre la Renta: El Impuesto sobre la Renta es el principal tributo que se recauda en México, el cual están obligado a pagarlo las personas físicas y morales que residan en México o en el extranjero respecto de los ingresos que obtengan, en la mayoría de los casos sin importar dónde se encuentre la fuente de riqueza de donde provengan. En su generalidad, este impuesto se determina sobre las utilidades que se obtienen, las cuales se determinan restando al total de los ingresos que la Ley considera acumulables para efectos de pago las deducciones que la misma autoriza. El Artículo 40 de esta Ley señala que tratándose de activos fijos el porciento máximo autorizado para la deducción de inversiones en el caso de maquinaria y equipo para la generación de energía proveniente de fuentes renovables es del 100%, como lo es aquélla que por su naturaleza o mediante un aprovechamiento adecuado se consideran inagotables, tales como la energía solar en todas sus formas; la energía eólica; la energía de los océanos en sus distintas formas; la energía geotérmica, y la energía proveniente de la biomasa o de los residuos. Para el caso de maquinaria y equipo 100% en la conversión a consumo de gas natural y para prevenir y controlar la contaminación ambiental en cumplimiento de las disposiciones legales respectivas, según lo establece el Artículo 41 de la misma.

El Título III denominado Régimen de las Personas Morales con fines no lucrativos señala quienes no son contribuyentes del Impuesto sobre la Renta, es decir, que no deben pagar el mismo, entre las cuales se encuentran las siguientes:

Artículo 95. Para los efectos de esta Ley, se consideran personas morales con fines no lucrativos, además de las señaladas en el artículo 102 de la misma, las siguientes: XIX. Las sociedades o asociaciones civiles, organizadas sin fines de lucro que se constituyan y funcionen en forma exclusiva para la realización de actividades de investigación o preservación de la flora o fauna silvestre, terrestre o acuática, dentro de las áreas geográficas definidas que señale el Servicio de Administración Tributaria mediante reglas de carácter general, así como aquellas que se constituyan y funcionen en forma exclusiva para promover entre la población la prevención y control de la contaminación del agua, del aire y del suelo, la protección al ambiente y la preservación y restauración del equilibrio ecológico.

#### Ley Del Impuesto Especial Sobre Producción Y Servicios

Tratándose del uso de productos que dañen el medio ambiente, el Artículo 1º de la Ley del Impuesto Especial sobre producción y servicio señala que están obligadas al pago de éste impuesto las personas físicas y las morales que realicen la enajenación de gasolinas, diesel para uso automotriz de bajo azufre, diesel de uso automotriz de alto azufre, diesel para uso industrial (de bajo y de alto azufre), y diesel para uso de vehículos marinos.

Ley Federal de Derechos: La Ley Federal de derechos tiene por objeto establecer el monto que se debe pagar por el uso o aprovechamiento bienes del dominio público de la Nación, así como por recibir servicios que presta el Estado en sus funciones de derecho público, excepto cuando se presten por organismos descentralizados u órganos desconcentrados y en este último caso, cuando se trate de contraprestaciones que no se encuentren previstas en la misma. No es la excepción, que esta ley contemple cuotas que se deben cubrir cuando se trate de actividades relacionadas con la materia ambiental. En la Tabla 1 que se presenta a continuación se muestran algunas de las actividades de impacto ambiental que contempla la Ley Federal de Derechos, las cuales se encuentran obligadas al pago del mismo:

Tabla 2: Pago de Derechos

Artículo	
191-A	Por el otorgamiento de concesiones, permisos y autorizaciones, para pesca o actividades acuícolas
194-C	Por el otorgamiento de permisos, prórrogas, sustituciones, transferencias o concesiones para el uso o aprovechamiento
	de elementos y recursos naturales dentro de las áreas naturales protegidas, y para colecta de material parental de
	especies amenazadas o en peligro de extinción
194-H	Se pagará el derecho de impacto ambiental de obras o actividades cuya evaluación corresponda al Gobierno Federal,
	por la recepción, evaluación y, en su caso, el otorgamiento de la resolución del informe preventivo
194-K	Por la recepción, evaluación y dictamen del programa de manejo forestal y, en su caso, la autorización o refrendo de la
	autorización de aprovechamiento de recursos forestales de especies maderables de clima templado y frío.
194-L	Por la recepción, evaluación y dictamen del programa de manejo forestal y, en su caso, la autorización o refrendo de la
	autorización de aprovechamiento de recursos forestales, de especies maderables de clima árido y semiárido
194-M	Por la recepción, evaluación y dictamen de los estudios técnicos justificativos y, en su caso, la autorización de cambio de uso de
	suelo en terrenos forestales, se pagará el derecho de cambio de uso de suelo de terrenos forestales
194 <b>-</b> O	Por el otorgamiento de la licencia ambiental única para la prevención y control de la contaminación de la atmósfera, a las fuentes
	fijas de jurisdicción federal que emitan olores, gases o partículas sólidas o líquidas a la atmósfera
194-P	Por los servicios de verificación y certificación de equipos de medición de contaminantes de vehículos automotores en circulación
	en centros autorizados, se pagará el derecho de prevención y control de la contaminación
194-Q	Por el servicio de certificación y verificación de emisiones contaminantes de vehículos automotores nuevos
194-T-1	Por la recepción, estudio de la solicitud y, en su caso, autorización por primera vez para importar y exportar residuos peligrosos
194-T-6	Por la recepción, análisis y, en su caso, aprobación de la propuesta de remediación de pasivo ambiental, y de emergencia ambiental.
196	Por el aprovechamiento de la vegetación arbórea de bosques nacionales en terrenos pertenecientes al Gobierno Federal
197-A	Por la explotación de la vegetación arbórea en los cauces y zona federal de los ríos
198	Por el uso o aprovechamiento de los elementos naturales marinos e insulares sujetos al régimen de dominio público de la Federación
	e dentro de las Áreas Naturales Protegidas competencia de la Federación
199-B	Por el aprovechamiento de los recursos pesqueros
222	Están obligadas al pago del derecho sobre agua, las personas físicas y las morales que usen, exploten o aprovechen aguas nacionales,
	le hecho o al amparo de títulos de asignación, concesión, autorización o permiso, otorgados por el Gobierno Federal, de acuerdo
	a de disponibilidad de agua en que se efectúe su extracción
223	Por la explotación, uso o aprovechamiento de aguas nacionales de fuentes superficiales o extraídas del subsuelo, para la generación
hidroeléct	
238	Por el aprovechamiento extractivo de ejemplares de fauna silvestre, en predios federales y zonas federales
238-A	Cuando el aprovechamiento de una especie esté vedada por las disposiciones en vigor, se pagará el derecho de aprovechamiento
276	Por el uso o aprovechamiento de bienes del dominio público de la Nación como cuerpos receptores de las descargas de aguas
	residuales, quienes descarguen en forma permanente, intermitente o fortuita aguas residuales en ríos, cuencas, cauces, vasos,
	aguas marinas y demás depósitos o corrientes de agua, así como los que descarguen aguas residuales en los suelos o las infiltren
	en terrenos que sean bienes nacionales o que puedan contaminar el subsuelo o los acuíferos

La Tabla 2 presenta las actividades en materia ambiental por las cuales se debe realizar un pago de derechos conforme a la Ley Federal de Derechos 2012.

Como se pude observar, varias de las actividades señaladas en la Ley Federal de Derechos y por las cuales se cobran los mismos, se refieren a situaciones que de forma directa o indirecta afectan el medio ambiente.

#### METODOLOGÍA

De acuerdo con el método de investigación utilizado, la presente investigación es de caso práctico, pues se enfoca a un problema real respecto del análisis y evaluación de la actuación ambiental de las pequeñas empresas agrícolas del valle de Autlán. El objetivo principal de este estudio reflejar en los Estados Financieros los costos ambientales y los beneficios fiscales de las empresas antes señaladas..Para desarrollar las secuencias operativas de la investigación, se ejecutaron los siguientes pasos:

- Recopilación del material bibliográfico, histórico, legal pertinente a los objetivos y fundamentos teóricos del estudio y a la selección de información.
- Definición de los aspectos metodológicos pertinentes al desarrollo del estudio.
- Aplicación de encuestas y adecuación de las cuentas contables del catálogo de cuentas de las empresas a fin de medir su actuación ambiental.
- Análisis y presentación de los resultados.

#### RESULTADOS

*Los avances que se tienen hasta el momento son:* Se ha elaborado una encuesta misma que se ha aplicado a evaluar a las pequeñas empresas agrícolas del Valle de Autlán, mediante la aplicación de una encuesta que permita conocer los costos ambientales y sus erogaciones en activos ambientales.

Algunas de las variables que se han considerado en la encuesta son:

Producto que cultiva

Superficie del terreno cultivado

Número de personas que laboran en la empresa en las labores propias de la agricultura

Si se realiza la inocuidad alimentaria en la producción

Técnica de producción utilizada

Tratamientos químicos

Control de inspección e higiene

Certificación

Costo de la producción por hectárea

Costo de Inversiones en activos efectuadas

Maquinaria utilizada

Rendimiento de la producción

A la fecha el avance de aplicación de las encuestas es del 40%, pretendiendo terminar con la aplicación en el mes de Enero de 2013 y a partir de ello tabular los resultados.

### CONCLUSIONES

En las páginas anteriores se ha dado a conocer un concepto, una visión empresarial, un modelo de negocios que, en la práctica, se aleja por completo de la tradición administrativa mexicana de las ganancias por las ganancias mismas, sin consideraciones muchas veces de tipo ético, alimenticio, ecológico, de protección al medio ambiente, como deberían ser todas las acciones que emanen de la actividad humana. A partir de los resultados de esta investigación se pretende diseñar e implementar un Sistema de Contabilidad Ambientar a fin de llevar a cabo acciones concretas con respecto al cuidado del medio ambiente, a través de la identificación de los Activos Ambientales y los Costos y Gastos Ambientales lo cuales se muestren en sus Estados Financieros, lo anterior a efecto de medir el impacto ambiental y a través de los resultados influir para resarcir algún daño ambiental, o para cubrir demandas externas por cualquier daño generado y que lo refleje la propia contabilidad. De igual manera se pretende que a partir de estos resultados se implemente un sistema de renovación de maquinaria y equipo e inversiones que ayuden a contrarrestar el daño al medio ambiente o bien para cuidar el medio ambiente y obtener los beneficios fiscales como son la deducción en el Impuesto Sobre la Renta y en el Impuesto Empresarial a Tasa Única sobre dichas erogaciones.

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Ley del Impuesto Especial sobre producción y servicios

### BIOGRAFÍA

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### RESUMEN

El nuevo ambiente de los negocios exige a las organizaciones, un replanteamiento en sus estrategias empresariales, para adecuarlas al nuevo entorno empresarial que demanda un mercado cada vez más globalizado y competitivo. Así, la innovación y las tecnologías de la información y comunicación (TICs) surgen como dos elementos esenciales que deben ser incorporados en el diseño e implementación de las estrategias empresariales, y son dos factores que permiten mejorar la calidad de las empresas, principalmente de las Pymes. En este sentido, este estudio con una muestra de 1970 empresas de 21 países de Iberoamérica analiza la relación existente entre la innovación, las TICs y la calidad de las Pymes de 21 países de Iberoamérica. Los resultados obtenidos muestran, por un lado, que la innovación ejerce un efecto positivo significativo en la calidad de las Pymes.

PALABRAS CLAVE: Innovación, TICs, Calidad, Pyme.

# THE RELATIONSHIP BETWEEN INNOVATION, ICT AND QUALITY: A PERSPECTIVE OF THE IBERO-AMERICAN SMES

### ABSTRACT

New business environment requires a rethink on their business strategies, organizations, to adapt them to the new business environment that demands an increasingly globalised and competitive market. Thus, information and communications technology (ICT) emerge as two essential elements that should be incorporated into the design and implementation of business strategies, and are two factors that allow to improve the quality of the companies, mainly SMEs. In this sense, this study with a sample of 1970 companies from 21 countries of Ibero-America analyzes the relationship between innovation, ICT and the quality of SMEs in 21 countries of Latin America. On the one hand, the results show that innovation exerts a significant positive effect on the quality of the companies and, on the other hand, ICTs also exert a significant positive effect on the quality of SMEs.

**KEYWORDS:** SMEs, innovation, ICT, quality.

### **INTRODUCCIÓN**

La innovación es una estrategia empresarial elemental hoy en día para la mayoría de los negocios, y diversos investigadores y académicos la definen comúnmente como la adopción de nuevos conceptos o comportamientos en las organizaciones (Shwu-Ing & Chiao-Ling, 2011). Asimismo, la innovación también puede ser considerada como el desarrollo o creación de nuevos productos, nuevos servicios, nueva tecnología y nuevos sistemas de gestión empresarial (Shwu-Ing & Chiao-Ling, 2011), los cuales pueden generar efectos positivos significativos tanto en el desempeño de las organizaciones Como en el mejoramiento del ambiente de los negocios que permita la supervivencia y crecimiento de las empresas

(Bir, Schacht & Kaufmann, 1988). Por otro lado, el uso de las tecnologías de la información y comunicación (TICs) en las organizaciones, principalmente en las pequeñas y medianas empresas (Pymes), facilita el desarrollo e implementación de actividades de calidad tanto al interior como al exterior de las empresas (Siu, Lai, Keshwar & Teeroovengadum, 2011). Por lo tanto, existen diversos trabajos publicados en la actual literatura que han aportado suficiente evidencia empírica que demuestra que existe una estrecha relación positiva significativa entre el uso de las TICs y la calidad. En este sentido se hace necesaria la realización de más estudios que permitan analizar con mayor detalle la relación existente entre las TICs y la calidad en las organizaciones, sobre todo en las Pymes, tanto en empresas de servicios como en la industria manufacturera nacional como internacional (Siu *et al.*, 2011). Por lo tanto, la principal contribución de este trabajo de investigación es el análisis de la relación existente entre la innovación, las TICs y la calidad en las Pymes manufactureras y de servicios en 21 países de Iberoamérica, mediante una muestra de 1983 empresas.

### **REVISIÓN DE LA LITERATURA**

El desarrollo del modelo teórico de la investigación describe la relación existente entre la innovación, las TICs y la calidad de las Pymes. En este sentido, en las siguientes secciones se intentará clarificar los distintos componentes del modelo, a fin de sustentar los planteamientos y resultados obtenidos.

### Innovación Y Calidad

La actual literatura considera que la innovación es un componente esencial en el diseño e implementación de estrategias empresariales, y puede considerarse como la aplicación de nuevas ideas para desarrollar o modificar productos, servicios, procesos o sistemas de gestión (Robbins, 1996), o bien también puede considerarse como cualquier forma o método diferente de hacer las cosas (Porter, 1990). Por lo tanto, las organizaciones, principalmente las pequeñas y medianas empresas (Pymes), tienen que realizar continuamente actividades de innovación para mantener e incrementar sus ventajas competitivas (Wernerfelt, 1984; Berry & Parasuraman, 1991). Adicionalmente, Freeman (1997) consideró que la innovación es el esfuerzo que realizan las empresas a través del uso de la tecnología y de los sistemas de información para desarrollar, producir y comercializar los nuevos productos que requiere tanto la industria como los clientes y consumidores.

Tushman y Nadler (1986) llegaron a la conclusión de que la innovación puede ser concebida como la creación de nuevos productos, servicios o procesos de producción. Por su parte, Frankle (1990) concluyó en su estudio que la innovación es la modificación o invención de ideas, que permiten mejorar y desarrollar continuamente los productos y servicios que demandan los clientes y consumidores. Por un lado, la relación entre la innovación y la calidad también puede encontrarse tanto en las metas como en los resultados de las actividades de la organización, puesto que por ejemplo los nuevos productos resultados de la investigación y desarrollo, el incremento del valor en la cadena de suministro y la modernización de los sistemas y formas de trabajo, son algunas de las áreas más importantes en las cuales se comúnmente se realizan mayores actividades de innovación en las empresas (Shwu-Ing & Chiao-Ling, 2011). Por tal motivo, Ahmed y Zairi (2000) consideraron que la relación entre la innovación y la calidad de los productos y/o servicios. Calidad en los procesos de operación Y Calidad en los sistemas de gestión Con base en los argumentos presentados anteriormente, en estos momentos se puede establecer la siguiente hipótesis:

H1: La innovación tiene efectos positivos significativos en la calidad

TICs y Calidad Mucho se ha escrito en la literatura acerca del uso y aplicación de las tecnologías de la información y comunicación (TICs), como un factor fundamental que permite incrementar

significativamente la gestión de la calidad de la organización. Sin embargo, también se ha expuesto en la literatura la problemática existente en las TICs y los probables éxitos de la calidad, como es el caso de los estudios realizados por Sobkowiak y LeBleu (1996) y Pearson y Hagmann (1996). De igual manera, con la excepción de algunos pocos estudios, la mayoría de los trabajos publicados en la literatura que relacionan las TICs y la calidad han sido descriptivos, y solamente han presentado los resultados de cómo el uso de las TICs incrementa el nivel de calidad (Ang *et al.*, 2000).

Recientemente en la literatura diversos investigadores y académicos han llegado a la conclusión de que la aplicación de las TICs en las diversas áreas de la organización, genera un crecimiento y expansión de la calidad (Siu *et al.*, 2011). Una posible explicación de esta conclusión puede encontrarse en el estudio de Mensching y Adams (1998), quienes consideraron que un incremento significativo en la inversión de todo tipo de TICs en la empresa, es uno de los factores más importantes que permiten un incremento significativo en la calidad de toda la organización. Asimismo, en un estudio presentado con anterioridad por Murray (1991), este investigador llegó a la conclusión de que diversos investigadores y académicos estaban considerando cada vez más a las TICs, tanto para la medición como para entender y mejorar el nivel de calidad de las organizaciones. Con base en los argumentos presentados anteriormente, en estos momentos se puede establecer la siguiente hipótesis:

H2: Las TICs tienen efectos positivos significativos en la calidad

### METODOLOGÍA

El artículo incluye una revisión extensa de los trabajos de diferentes autores sobre el tema en cuestión así como también el análisis e interpretación de las respuestas de las 1970 Pymes encuestadas en 21 países de Iberoamérica en el año 2009. Esto último se organizó en tres partes a saber: una referente a las *Actividades de Innovación* que han realizado las Pymes en los dos últimos años; una segunda parte referente a las *Tecnologías de la Información y Comunicación y los cambios en los sistemas de gestión*; y la otra, tiene que ver con los *cambios en los sistemas de gestión de la Calidad*.

### Variables

*Variable Dependiente:* Para la medición de la calidad, se utilizaron tres preguntas que fueron medidas con una escala tipo Likert de cinco puntos, con 1 = totalmente en desacuerdo a 5 = totalmente de acuerdo como límites, y fueron adaptadas de García (2007). La Tabla 1 muestra con mayor detalle las preguntas utilizadas para la medición de la calidad. Las preguntas utilizadas para medir la Calidad tienen la formulación: En comparación con sus competidores clave, su empresa se diferencias porque: Ofrece productos de mayor calidad. Dispone de procesos internos más eficientes. Cuenta con clientes más satisfechos

*Variables Independientes y de Control:* Para medir las actividades de innovación se pidió a los gerentes de las 1970 Pymes Iberoamericanas encuestadas, que contestaran si en la organización se habían realizado innovaciones en los dos años anteriores a la aplicación de la encuesta (1 = Si y 2 = No), en productos/servicios, procesos y sistemas de gestión, y para las empresas que contestaron que sí habían realizado actividades de innovación, se les solicitó que evaluarán el grado de importancia de dichas innovaciones (1 = Poco importante a 5 = Muy importante, como límites), ya que el enfoque subjetivo de percepción de la innovación por parte del gerente resulta el método más apropiado para el caso de las Pymes (Hughes, 2001; García, Martínez, Maldonado *et al.*, 2009). Las preguntas utilizadas en la encuesta para medir las actividades de innovación tiene la formulación: ¿Ha realizado algún cambio o mejora en sus productos, procesos o sistemas de gestión en los últimos 2 años? En caso afirmativo indique el grado de importancia de estos cambios para su empresa y debe seleccionar si los cambios son en Productos o Servicios; Proceso; Sistemas de gestión Por otro lado, para medir el grado de utilización de las TICs se

pidió a los gerentes y/o propietarios de las 1970 Pymes Iberoamericanas encuestadas, que indicaran si en su empresa disponían o no (1 = Si y 0 = No) de los siguientes seis elementos: ¿Dispone de correo electrónico (E-mail)?; ¿Dispone de página WEB?; ¿Realiza compras electrónicas usando Internet?; ¿Utiliza banca electrónica?; ¿Realiza mercadotecnia utilizando Internet?; ¿Tiene Internet corporativo? A partir de las respuestas obtenidas se construyó la variable TICs a través de la suma de las preguntas afirmativas, teniendo por tanto una variable nominal con valor de 0 a 6. Esta forma de configurar la variable puede verse en García (2007) y García, Martínez, Maldonado *et al.* (2009).

### RESULTADOS

Para verificar tanto la relación existente entre la innovación, las TICs y la calidad de las Pyme y comprobar las hipótesis de investigación planteadas, se realizó un análisis de regresión lineal por medio del MCO a través de los dos siguientes modelos:

*Modelo 1: Calidad*<sub>i</sub> =  $b_0 + b_1 \cdot \text{Innovación}_i + b_2 Tamaño + b_3 Edad + \varepsilon_i$ 

*Modelo 2: Calidad*<sub>i</sub> =  $b_0 + b_1 \cdot TICs_i + b_2$  *Tamaño* +  $b_3$  *Edad* +  $\varepsilon_i$ 

Donde, *Calidad<sub>i</sub>* corresponde a la media de las tres variables utilizadas para su medición. *Innovación<sub>i</sub>* indica el grado de importancia de la innovación en productos/servicios, procesos y sistemas de gestión. TICs<sub>i</sub> corresponden a su grado de utilización en la empresa. *Tamaño*, número medio de empleados, y *Edad*, años de existencia de la empresa. Estimamos un modelo para la variable innovación y otro modelo para la variable TICs. Observamos en ambos modelos que las variables independientes tienen un factor de la inflación de la varianza (VIF) cercano a 1, por lo que descartamos la presencia de multicolinealidad.

La Relación entre la Innovación y la Calidad es (n = 1970). Los resultados muestran que una mayor utilización de la innovación en el seno de las Pymes influye positivamente y de forma muy significativa en la calidad (coeficiente estandarizado = 0.190 y p < 0.05) por lo que se confirma la primera hipótesis planteada. Sin embargo, el tamaño y la edad no afectan al grado calidad de la Pyme, al no resultar variables significativas estadísticamente. La validez del modelo se contrasta a través del R<sup>2</sup> ajustado que resultó de 0.092 y un valor de la F de 5.596 (p < 0.05). Las variables independientes tienen un factor de la inflación de la varianza (VIF) cercano a 1 (1.058), por lo que descartamos la presencia de multicolinealidad.

La Relación entre las TICs y la Calidad es (n = 1970). Se demuestra que una mayor utilización de las TICs en el seno de las organizaciones influye positivamente y de forma muy significativa en la actividad innovadora de la Pyme (coeficiente estandarizado = 0.135 y p < 0.05) por lo que se confirma la segunda hipótesis de trabajo planteada. Sin embargo, el tamaño y la edad no afectan al grado de innovación de la Pyme, al no resultar variables significativas estadísticamente. La validez del modelo se contrasta a través del R<sup>2</sup> ajustado que resultó de 0.084 y un valor de la F de 4.647 (p < 0.05). Las variables independientes tienen un factor de la inflación de la varianza (VIF) cercano a 1 (1.055), por lo que descartamos la presencia de multicolinealidad.

### CONCLUSIONES

Los resultados obtenidos en este estudio permiten concluir que la innovación tiene una estrecha relación y un impacto positivo significativo en la calidad de las actividades de la organización, por lo cual si los gerentes de las Pymes quieren mejorar el nivel de calidad de la empresa, entonces será necesario que inicialmente adopten e implementen actividades de innovación, porque ello les permitirá incrementar significativamente su nivel de calidad. Asimismo, también se puede concluir que las TICs tienen una estrecha relación y un efecto positivo significativo en la calidad de las actividades de las Pymes En este sentido, la innovación en productos o servicios, procesos y sistemas de gestión juegan un papel fundamental en las organizaciones, no únicamente como una estrategia empresarial sino también como un elemento básico que facilita e incide en el mejoramiento de la calidad de los productos, procesos y sistemas de gestión. De igual manera, la adopción e implementación de las TICs generan diversos beneficios en la organización, entre ellos el mejoramiento de la calidad de las actividades desarrolladas por las Pymes, lo que conlleva que los gerentes tienen que poner más atención en el uso de las TICs que posee el negocio. Por lo tanto, los gerentes de las Pymes deberán en todo momento de desarrollar e implementar diversos cursos de capacitación para el personal sobre las TICs en la organización

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# EL SUCESOR, FIGURA CLAVE EN EL ÉXITO DE LA EMPRESA FAMILIAR

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### RESUMEN

La presente investigación denominada: "El Sucesor, Figura Clave en el Éxito de la Empresa Familiar", identifica los elementos estratégicos que integran la figura de: familia, fundador, y sucesor quienes tienen la facultad de tomar decisiones, así mismo, se aborda el plan de sucesión. El fundador de la empresa familiar es el tomador de decisiones por excelencia y éste con el tiempo, debe proyectar un plan de sucesión de tal forma que pueda identificar a quien elegir y preparar como su sucesor, capacitándolo en el cargo que va a heredar cuando el primero no se encuentre y el segundo tenga la posibilidad de lograr el desarrollo y crecimiento de la empresa familiar. El desafió de las empresas familiares es conseguir la continuidad de su misión a través de las generaciones. Este ideal tiene fuertes implicancias económicas y sociales para la comunidad, ya que son fuentes de creación de riqueza y de empleo. (Dodero, 2005). El empresario ó fundador generalmente busca la subsistencia y desarrollo de la empresa como de la familia. Con el fin de lograr la continuidad se requiere identificar al sucesor ideal que reúna los requisitos del fundador y las necesidades de la empresa familiar. Algunos fundadores trabajan hasta el día de su muerte y nunca planean su retiro dejando problemas familiares sin desearlo. Es uno de los temas más importantes, delicados y costosos, lamentablemente se le brinda poca atención, porque no se dedica el tiempo adecuado ni el momento para preparar al sucesor que va a ocupar el lugar del fundador.

PALABRAS CLAVE: Sucesor, Fundador y Empresas Familiares.

### THE SUCCESSOR, KEY FIGURE IN THE SUCCESS OF THE COMPAMY HOUSEHOLD

### ABSTRACT

This research called "The Successor, a key figure in the Family Business Success", identifies the strategic elements that make up the figure of: family, founder and successor who have the power to make decisions, also, addresses the succession plan. The founder of the family business is the ultimate decision maker and he eventually must project a succession plan so that you can identify who choose and prepare his successor, enabling the position he will inherit when the is not first and second have the possibility of achieving the development and growth of the family business. The challenge of family businesses is to get the continuity of its mission through the generations. This ideal has strong economic and social implications for the community, as they are sources of wealth creation and employment. (Dodero, 2005). The founder or entrepreneur usually seek survival and development of the company like family. In order to ensure continuity is required to identify the ideal successor qualifying the founder and the needs of the family business. Some founders work until the day of his death and never leaving your retirement plan unwillingly family problems. It is one of the most important, delicate and expensive, unfortunately gives little attention, because it is dedicated adequate time nor the time to prepare a successor who will take the place of the founder.

**JEL:** L21, M14, M51, M53

**KEYWORDS:** Successor, Founder and Family Businesses.

### INTRODUCCIÓN

La problemática que viven las empresas familiares están muy lejos de ser una empresa ideal, ya que la dirección recae en una sola persona, aunque delegue facultades siempre estará rehén de sus propias decisiones, se eligieron a algunas empresas familiares con el fin de llevar a cabo esta investigación.

### Antecedentes

En la familia es donde los humanos aprenden a vivir en armonía y a socializar, se comparten intereses comunes, se apoyan mutuamente, desarrollan sentimientos, afectos, hábitos valores y costumbres, en una familia sólidamente establecida se encuentran las condiciones necesarias para la realización de sus integrantes, se considera la institución más antigua que constituye la comprensión y el funcionamiento de una sociedad y por medio de ella se prepara a los individuos para que cumplan el papel social que corresponde como ser humano, en el seno de la familia es donde nace y aprende el comportamiento moral, en la familia se encuentran todos los elementos necesarios para un desarrollo pleno. (Krebs, 2006)

Las empresas familiares son las organizaciones económicas más antiguas de la historia de la humanidad. Su origen más remoto está inscrito en el seno de la familia, ya que los procesos productivos, distributivos y asignativos fueron originalmente una actividad familiar, desde que nuestros ancestros comenzaron a canjear un producto por otro, o cuando la esposa e hijos ayudaban a recoger las cosechas. Ese intercambio es originado en el seno de la familia y ha transcendido en el tiempo hacia otras esferas sociales, dando así el camino para un desarrollo cada vez mayor de las empresas familiares hasta nuestros días.

### Importancia Y Justificación Del Estudio

En Monclova, Coahuila, se identifica una cantidad significativa de empresas familiares y se busca no solo la permanencia sino el desarrollo y continuidad. La Secretaria de Economía (2008) indica la cantidad total de PYMES consideradas como empresas familiares, que se localizan en el Estado de Coahuila clasificadas por tipo de sector y tamaño.

#### Definición Del Problema

Cuando ya está el fundador terminando su ciclo laboral o su ciclo vital y se debe preparar para elegir adecuadamente él posible candidato de la sucesión. (Contreras, 2007). En el momento que se proyecta la sucesión el fundador se encuentra con diversas opciones como son: ventajas, desventajas, alternativas, inconvenientes, y oportunidades. (Leach, 1993). La sucesión es la última prueba de una empresa familiar, el paso de la primera a la segunda generación es de las más difíciles, las estadísticas demuestran que es conveniente que se realice mientras el fundador esta activo.

### **Objetivo General**

Elaborar un modelo de capacitación para la sucesión exitosa y poder tomar la decisión de elegir al sucesor en una empresa familiar.

#### Objetivos Específicos De La Investigación

La capacitación del sucesor en valores familiares. La capacitación del sucesor en aspectos económicos, administrativos y tecnológicos.

### Marco Teórico

Con el análisis de la literatura se hace posible llegar a una definición de los temas de investigación, y a partir de ello se construye el modelo que identifica los valores que posee una empresa familiar. Dicho modelo permitirá la continuidad de la empresa familiar, ya que depende en gran manera del estilo de educar a los sucesores, esos valores son: de actitud y de relación entre el fundador y el sucesor; la formación desde temprana edad asegura la continuidad sin sobresaltos cuando el fundador salga de la empresa y el sucesor tome las riendas del negocio como si el primero estuviera.

### Empresa Familiar

Las empresas familiares en México, como en otros países son y serán motivo de estudio en un sin número de aspectos y características, por ello se debe analizar cómo nacieron las empresas, cómo están estructuradas, de qué tamaño son, cómo funcionan, son temas verdaderamente apasionantes (Ríos, 2007). La empresa familiar es una realidad que responde a una necesidad del ser humano y que nunca desaparecerá, porque nace en la familia y es beneficiada, pero tanto la familia como la empresa evolucionan de acuerdo a etapas, ciclos de vida y retos. Alrededor del 80% de las empresas en México, son controladas por familias con la característica principal de transmitir su experiencia de generación tras generación, éstas administran, planean en base a su experiencia sobre el mercado, como bien es cierto las empresas o negocios familiares sean competitivos o no, carecen de infraestructura. (Baqueiro y Buen Rostro, 2006) esto depende de las culturas, costumbres, en la cual influyen una gran cantidad de factores con el fin de formar una institución. (Contreras, 2007)

Las empresas familiares actualmente viven una problemática económica, esto aunado a una pobre legislación que se está viviendo en este país, como son excesos de cargas fiscales, legales y de seguridad social. Así como otro de los aspectos más críticos es la gestión de la empresa familiar. Las empresas familiares desempeñan un papel muy importante, son escuelas donde las personas aprenden, se desarrollan y adquieren un papel activo en la sociedad.

### Empresas Familiares En Monclova, Coahuila.

Al efectuar un análisis a la estadística se infiere la suma de las pequeñas y medianas empresas que constituyen 1,916 de un total de 10,338 empresas. (Tabla 1, anexos) de las cuales 189 de estas pertenecen al municipio de Monclova, Coahuila. (Tabla 2, anexos) y forman parte del sector económico de esta investigación. (Secretaria de Economía, 2008)

### Fundador De Empresa Familiar.

Generalmente las empresas familiares inician con el fundador para atender una necesidad del mercado, quien ve en dicha necesidad una oportunidad de empezar un negocio, el fundador inicia la empresa familiar en forma modesta, por carecer de suficientes recursos, en esta primera etapa la empresa depende totalmente del fundador para sobrevivir, este ciclo es cuando la mayoría de los negocios pequeños mueren. Los fundadores están tan ocupados en sus empresas que ven solo las necesidades y los problemas de la empresa familiar, olvidándose de las necesidad, desarrollo y capacitación del sucesor. Es un proceso de toda la vida la formación del futuro sucesor, el fundador debe involucrar a sus hijos en sus empresas de acuerdo a su capacidad y edad desde que los hijos tienen conciencia, los padres deben transmitir los valores integrales, prepararlos con responsabilidad para el futuro de la empresa familiar. (Leach, 1993)

*Futuro Sucesor de Empresa Familiar:* El crecimiento genera más complejidad, demanda la necesidad de nuevos líderes capaces de sacar adelante la empresa familiar al enfrentar nuevos retos para el futuro sucesor, se requiere contar con los elementos de: preparación, experiencia, liderazgo y valores integrales,

cuando el sucesor no tiene el talento que se requiere se tendrá un costo, considerando que la empresa familiar perderá competitividad. (Leach, 2003) El sucesor debe dedicar tiempo suficiente en aprender la historia de la empresa familiar, concentrarse en las cuestiones estratégicas, en hechos fundamentales y bases para la toma de ciertas decisiones. (Aronoff y Ward, 2000). Es imprescindible planear su entrenamiento y formación dentro de la empresa y en los primeros años aprender tanto como sea posible y desarrollar un plan estructurado y que represente una experiencia de aprendizaje significativo en el contexto del plan. (Leach, 1993)

*Preparación del sucesor:* La continuidad de la empresa familiar depende de educar adecuadamente a los sucesores, inculcando valores y actitudes. La relación entre el padre y el hijo, es el mejor sistema de educación, ejemplo de promover la transmisión de los valores empresariales y de ilusionar e involucrar para su futura incorporación en la empresa familiar. Las empresas familiares tienen un trayecto y una experiencia muy arraigada, no obstante cuando llegan nuevas generaciones con otras ideas, algunos acuerdos a veces dejan de ser respetados. (Baqueiro, 2006) Por esta razón es indispensable contar con el protocolo familiar para respetar los acuerdos establecidos cuando ya no se encuentre el fundador, y la visión de beneficiar el entorno general de la empresa familiar. Etapa en que el sucesor es el protagonista, ya identificado como candidato debe recibir formación de acuerdo a las necesidades de la empresa, adquirir experiencia en otras empresas para conocer a profundidad la empresa familiar, relacionarse con el personal, saber que muy pronto será el sucesor ó líder de la empresa, la experiencia ayuda a identificar si es capaz de afrontar el reto ó decidir desistir. (Guinjoan y Llauradó, 2000)

*Características para Identificar al sucesor:* Para el sucesor es esencial cultivar estas habilidades: Liderazgo, aceptación del cargo, formación, involucrarse en la empresa, adquirir experiencia fuera de la empresa, involucrar a todos en sus objetivos, comunicación, planeación, organización, solución de problemas y toma de decisiones. El futuro sucesor debe prepararse para un puesto que aún no existe y que se crea en una época que nadie puede prever con seguridad. Debido a que las empresas cambian con tanta rapidez, los sucesores no solo deben prepararse para administrar la empresa familiar sino también para la rehabilitación estratégica y continuidad durante su gestión. (Aronoff y Ward, 2000) Una vez definido el perfil deseado del sucesor que será capaz de enfrentar las necesidades de la empresa y cumplir con las exigencias de la familia, se establecerán las reglas que se aplicarán para seleccionar al futuro sucesor, deben estar escritas como evidencia que existen, así como criterios que ayudan a planificar cada etapa del proceso. (Guinjoan y Llauradó, 2000)

*El sucesor capacidad de Liderazgo:* El líder debe ser visionario, motivador, comunicador, capaz de identificar las oportunidades donde otros no la ven, y vigilante del cumplimiento de la estrategia; pero a la vez, debe reconocer cuando requiere de apoyo y soporte, tanto del consejo administrativo de los accionistas, expertos internos y externos a su empresa y del resto de sus colaboradores (Calleros, 2008) De acuerdo a Leach (2003) "existe una regla de oro donde establece que antes de ingresar a la empresa familiar el sucesor debe dedicar tiempo para trabajar en otros ámbitos de empresas, para adquirir experiencia." Esto ayuda a consolidar su confianza y habilidades, obteniendo una perspectiva adicional a su identidad, para triunfar con sus propios méritos, su experiencia proporciona tranquilidad al demostrar que puede competir y ganar cualidades requeridas, que es más que llevar el apellido del fundador, adquirir una experiencia amplia de cómo opera otras empresas del mismo ramo lo capacita para transformar su visión, organización y estructura para la supervivencia de la empresa.

### Candidato a la dirección

Cuando se le preguntó al fundador de Bimbo porque eligió al más pequeño como sucesor dijo: "es una persona con una mente privilegiada y ha resultado ser un excelente y oportuno director del grupo, desde pequeño era palpable, su orden e inteligencia, tenía ocho ó nueve años cuando hacía sus programas de trabajo para el día, disponía las horas para arreglarse, jugar , leer y para mi sorpresa dejaba un espacio de

su tiempo para a pensar" y este al elegir su carrera profesional dijo: "sé papá que tengo una responsabilidad contigo y con el negocio que construiste, me prepararé para cumplir" esto fue una alegría para un padre y un valor para nuestra empresa. (Cherem, 2008) Que conmovedora experiencia hasta el octavo hijo resultó ser el sucesor en una empresa tan importante.No es saludable que intente criar a los hijos para que sean sus dobles, ellos han crecido en ambientes diferentes, tienen otro nivel de formación, distintas aspiraciones, se han unido a una empresa muy diferente a la que su padre estableció o se incorporo. El objetivo es orientar y compartir sus experiencias, esto puede ayudar al sucesor a crecer de acuerdo con sus propias aptitudes y preferencias. "El proceso de adquisición de virtudes humanas es un proceso lento, en el que se avanza gracias a la sucesiva repetición de los actos propios de cada virtud, es conveniente que a los sucesores se les presenten múltiples oportunidades para ejercitarlos, por su parte los predecesores deben tener paciencia convencidos de que cuando los esfuerzos son honestos e inteligentes los resultados siempre llegan." (Gallo, 1998) De esto se concluye que para la formación del sucesor, el fundador debe dedicar tiempo y esfuerzo.

### METODOLOGÍA

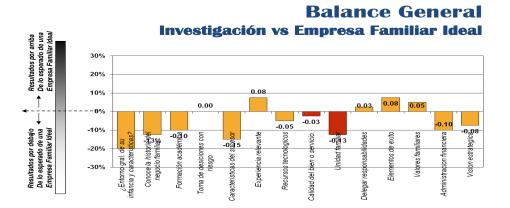
Como estrategia metodológica, se aplica el método cualitativo para obtener información de los personajes entrevistados, se extrajo la muestra de la población tipo no probabilístico. El instrumento de medición tipo cuestionario con técnica de la pregunta, se optó por el método de Robert Stake. obteniendo una muestra no probabilística en este caso es una muestra pequeña pero en profundidad de ocho fundadores entrevistados para conocer aspectos como: entorno familiar, la empresa, si cuenta con estratega fiscal, tiene identificado al sucesor y un plan de sucesión, para posteriormente alimentar el programa SPSS en la que se obtiene el balance de percepciones para conocer resultados obtenidos representados en gráfica y así comparar la investigación realizada con una empresa ideal.

### RESULTADOS

Las variables teóricas claves que se utilizan para comparar con las variables operativas y así identificar que tan lejos ó cerca esta la realidad del fenómeno de la sucesión en el momento de elegir al sucesor. Las variables operativas que superan expectativas son: experiencia relevante, delegar responsabilidad, elementos de éxito y valores familiares, como se muestra en la figura 1.

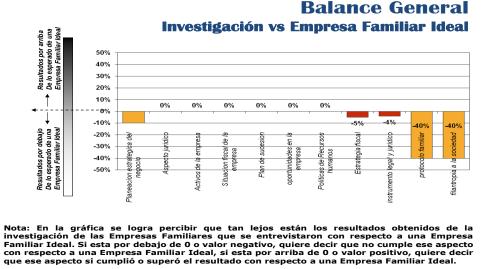
Estas cuatro variables operativas superaron las expectativas de la empresa ideal es decir que estas cumplen con el modelo de la empresa ideal. Variables operativas que no superaron expectativas son: características del sucesor, recursos tecnológicos, calidad del bien ó servicio, unidad familiar, administración financiera y visión estratégica. Estas variables se encuentran por debajo de las expectativas de una empresa ideal, es decir que no cumplen con el modelo ideal como se puede observar en la figura 1 y figura 1 complemento. Las variables teóricas aplicadas en la investigación concuerdan con las variables operativas.

Figura1: Balance General, Investigación vs. Empresa familiar ideal



Nota: En la gráfica se logra percibir que tan lejos están los resultados obtenidos de la investigación de las Empresas Familiares que se entrevistaron con respecto a una Empresa Familiar Ideal, si esta por arriba de 0 o valor positivo, quiere decir que no cumple ese aspecto si cumplió o superó el resultado con respecto a una Empresa Familiar Ideal, si esta por arriba de 0 o valor positivo, quiere decir que ese aspecto si cumplió o superó el resultado con respecto a una Empresa Familiar Ideal. \*Si los scores son negativos, se muestra que hay claramente áreas para realizar mejoras en cada uno de los criterios.

Figura1: complemento: Balance General, Investigación vs. Empresa familiar ideal



\*Si los scores son negativos, se muestra que hay claramente áreas para realizar mejoras en cada uno de los criterios.

De los ocho fundadores que se entrevistaron se identificó una deficiencia muy marcada en las empresas familiares, comparada con la empresa ideal, solo cuatro de veinticinco variables superaron las expectativas de la empresa ideal, esto se identifica en el balance de percepciones donde se extrae la muestra obteniendo como indicador el reporte de resultados (tabla 3 anexos), se logra percibir que tan lejos están los resultados obtenidos de la investigación de las empresas familiares que se entrevistaron con respecto a una empresa familiar ideal. Estadísticamente solo se cumple con 16%.

### CONCLUSIONES

Se identifica que hay una gran inestabilidad en la sociedad para las generaciones futuras. Por falta de integración en el núcleo familiar, porque los fundadores no dedican tiempo suficiente a sus futuros sucesores pues se encuentran demasiado ocupados, algunos fundadores se lamentan porque fueron exitosos en sus empresas no siendo así en la familia, por eso fundadores dediquen tiempo a sus futuros sucesores. Si los fundadores de las empresas familiares modernas dan prioridad a preparar adecuadamente a sus sucesores para el liderazgo, se logrará no solo la estabilidad sino la continuidad y éxito, cumpliendo así con los deseos del fundador de dejar huella.

### ANEXOS

	Tamaño de la empresa		Sector Productivo		Total
		Industria	Comercial	Servicios	10,338
Coahuila	Micro	719	4,714	2,742	8,175
	Pequeñas	480	564	476	1,520
	Medianas	176	172	48	396
	Grandes	119	63	65	247
	Totales	1,494	5,513	3,331	10,338

Tabla 1: Estadísticas de la Entidad de Coahuila por sector y tamaño de empresa.

La presente tabla es proporcionada por la Secretaría de Economía (2008), muestra que existen 10,338 empresas en el estado de Coahuila. Estas están divididas en los siguientes sectores: industrial 1,494, comercial 5,513 y de servicios 3,331. A su vez también muestra la división por tamaño de empresa en cada sector. Es decir, cuantas micros, pequeñas, medianas y grandes empresas hay por sector.

Tabla 2: Estadísticas de la Ciudad de Monclova por sector y tamaño de empresa.

Tamaño de la empresa	Sector Productivo			Total	
	Industria	Comercial	Servicios	502	
Micro	99	114	79	292	
Pequeñas	90	32	25	147	
Medianas	23	15	4	42	
Grandes	7	8	6	21	
Totales	219	169	114	502	

La presente tabla es proporcionada por la Secretaría de Economía (2008), muestra que existen 502 empresas en el municipio de Monclova, Coahuila. Estas están divididas en los siguientes sectores: industrial 219, comercial 169 y de servicios 114. A su vez también muestra la división por tamaño de empresa en cada sector. Es decir, cuantas micros, pequeñas, medianas y grandes empresas hay por sector.

		a empresarios

			Empresa Ideal Familiar		Diferencias Encuestados vs.	
	Investigación				Empresa Familiar	Ideal
	Media	%	Media	%	Faiiiiai	
Entorno general de su infancia y						
características?	4.00	80%	5.00	100%		-20%
Conoce la historia del negocio familiar,	4.38	88%	5.00	100%		-13%
Formación académica	4.00	80%	4.50	90%		-10%
Toma de decisiones con riesgo	5.00	100%	5.00	100%		0%
Características del sucesor	4.25	85%	5.00	100%		-15%
Experiencia relevante	4.88	98%	4.50	90%		8%
Recursos tecnológicos	4.25	85%	4.50	90%		-5%
Calidad del bien o servicio.	4.38	88%	4.50	90%		-3%
Unidad familiar	4.38	88%	5.00	100%		-13%
Delegar responsabilidades	4.63	93%	4.50	90%		3%
Elementos de éxito	4.88	98%	4.50	90%		8%
Valores familiares	4.75	95%	4.50	90%		5%
Administración financiera	4.50	90%	5.00	100%		-10%
Visión estratégica	4.13	83%	4.50	90%		-8%

Planeación estratégica del negocio	4.50	90%	5.00	100%	-10%
Aspecto jurídico	4.50	90%	4.50	90%	0%
Activos de la empresa	5.00	100%	5.00	100%	0%
Situación fiscal de la empresa	5.00	100%	5.00	100%	0%
Plan de sucesión	4.50	90%	4.50	90%	0%
Oportunidades en la empresa	4.50	90%	4.50	90%	0%
Políticas de Recursos humanos	4.50	90%	4.50	90%	0%
Estrategia fiscal	3.75	75%	4.00	80%	-5%
Instrumento legal y jurídico	4.00	80%	4.20	84%	-4%
Protocolo familiar	2.00	40%	4.00	80%	-40%
Filantropía a la sociedad	2.00	40%	4.00	80%	-40%
Total General	4.27	85%	4.61	92%	-7%

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# LA COOPERACIÓN INTEREMPRESARIAL Y SU RELACIÓN CON EL DESARROLLO DE LAS CAPACIDADES TECNOLÓGICAS EN LAS PYMES DE LA INDUSTRIA METALMECÁNICA DE LA REGIÓN CENTRO DE COAHUILA, EN MÉXICO

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### RESUMEN

En la actualidad, la naturaleza interactiva del proceso del cambio tecnológico promueve la cooperación entre empresas, las cuales deciden colaborar llevando a cabo diversos tipos de cooperación, mismos que inciden en el desarrollo de sus capacidades tecnológicas. Este trabajo pretende responder a las interrogantes ¿Cuál es el nivel de desarrollo de las capacidades tecnológicas alcanzado por las empresas que cooperan y las empresas que no cooperan? ¿Cuál es la relación que existe entre los tipos de cooperación interempresarial y el desarrollo de las capacidades tecnológicas en las pequeñas y medianas empresas (PyMES) de la industria metalmecánica de la región centro del estado de Coahuila en México?. La metodología utilizada consistió en obtener información cuantitativa mediante un cuestionario estructurado aplicado a 50 PyMES del sector y región mencionados, los datos obtenidos fueron analizados posteriormente a través del software estadístico SPSS, aplicando Cross Tabs y Coeficiente de Correlación de Spearman. Entre los resultados más relevantes se encontró que a un nivel de confianza del 99 % existe una relación positiva de 0.794 entre la cooperación interempresarial y las capacidades tecnológicas. El análisis también arrojó correlaciones positivas entre los tipos de cooperación interempresarial y los diferentes tipos de capacidades tecnológicas.

**PALABRAS CLAVE**: Cooperación Interempresarial, Capacidades Tecnológicas, Pymes Industria Metalmecánica.

### THE RELATIONSHIP BETWEEN INTERCOMPANY COOPERATION AND THE DEVELOPMENT OF TECHNOLOGICAL CAPABILITIES IN SMES OF THE METALWORKING INDUSTRY OF THE CENTRAL REGION OF COAHUILA, MEXICO

### ABSTRACT

At the present time, the interactive nature in the process of technological change is promoting cooperation between enterprises, which decide to collaborate performing various types of cooperation, affecting the development of their technological capabilities. This paper aims to answer the questions: Which is the level of development of technological capabilities achieved by cooperating firms and firms that do not cooperate? Which is the relationship between the types of intercompany cooperation and the development of technological capabilities in small and medium enterprises (SMEs) of the metalworking industry in the central region of the state of Coahuila in Mexico? The used methodology was to obtain quantitative information through a structured questionnaire applied to 50 SMEs of the mentioned sector and region, the data were further analyzed by SPSS software, using Cross Tabs and Spearman correlation coefficient. Among the most relevant results, it was found at a confidence level of 99%, that

there is a positive relationship of .794 between inter-firm cooperation and technological capabilities. The analysis also showed positive correlations between the types of intercompany cooperation and the different types of technological capabilities.

KEYWORDS: Intercompany cooperation, technological capabilities, metalworking industry SME.

### INTRODUCCIÓN

De acuerdo con la OECD (1996), derivado de la naturaleza interactiva del proceso del cambio tecnológico las firmas desarrollan vínculos que les ayudan a repartir los costos y riesgos asociados con los procesos de innovación, ganar acceso a nuevos conocimientos, adquirir componentes tecnológicos claves y compartir activos en la manufactura, la comercialización y la distribución. Estos vínculos o formas de asociación y cooperación pueden tener diferentes esquemas, siendo uno de ellos la formación de redes de pequeñas y medianas empresas que colaboran entre sí y se encuentran articuladas a una gran empresa. En el Municipio de Monclova, principal localidad de la región centro del Estado de Coahuila, se ubica Altos Hornos de México, S.A. de C.V. (AHMSA), la fundidora de acero más importante del país y motor del desarrollo de la región, a la cual se encuentran articuladas las pequeñas y medianas empresas (PyMES) de la industria metalmecánica, ya que en la cadena productiva se vinculan tanto hacia adelante, como hacia atrás. En estudios recientes efectuados en las Pymes de la industria metalmecánica de la región centro del estado de Coahuila (Velarde y Araiza, 2011) presentan evidencia con respecto a que las capacidades tecnológicas de vinculación son las que han sido menos desarrolladas por estas empresas, lo cual se deriva en una imperiosa necesidad de continuar efectuando estudios en torno al desarrollo de las capacidades tecnológicas. De lo anteriormente expuesto se derivan las siguientes preguntas en relación a las PyMES de la industria metalmecánica de la región centro del estado de Coahuila: ¿Cuál es el nivel de desarrollo de las capacidades tecnológicas alcanzado por las empresas que cooperan y las empresas que no cooperan? ¿Cuál es la relación que existe entre los tipos de cooperación interempresarial y el desarrollo de las capacidades tecnológicas?.

### **REVISIÓN LITERARIA**

El presente estudio se encuentra sustentado con la teoría del costo de transacción y la teoría de recursos y capacidades; bajo la primera perspectiva se ubica a la cooperación interempresarial como una alternativa de modalidad intermedia entendida según Williamson (1991) como formas híbridas o intermedias de organización. Bajo la segunda perspectiva, de acuerdo a Barney (1991) la teoría de recursos y capacidades asume que los recursos estratégicos que controlan las firmas dentro de una industria o grupo pueden ser heterogéneos y que los recursos y capacidades de la firma son fortalezas que pueden ser usadas para diseñar e implementar estrategias con el fin de mejorar su eficiencia y efectividad lo cual les hará más competitiva; por su parte Gulati (1998) sugiere que al cooperar, las empresas seleccionan a sus socios en función de la interdependencia existente entre los recursos poseídos por cada uno de ellos. Basado en lo anterior, en este estudio se considera que las empresas cooperan entre sí como una estrategia para lograr ventajas competitivas en función de los recursos necesitados y poseídos con la intención de desarrollar sus capacidades tecnológicas.

### La Cooperación Interempresarial

Dada la gran variedad de esquemas existentes en la asociación y cooperación de pequeñas empresas ésta ha sido abordada por diversos autores y organizaciones, aportando diverso instrumental analítico desde los famosos distritos industriales, pasando por los sistemas regionales de innovación hasta la actual posición dominante de los clusters y el uso de alianzas estratégicas, para efecto de este estudio se

adoptará la definición de cooperación interempresarial de Araiza y Velarde (2008, p. 3) elaborada a partir del trabajo que realizaron para fundamentar el estudio del proceso dinámico de la cooperación interempresarial "se define a la cooperación interempresarial como la interacción de las Pymes independientes con un propósito específico, que les permiten intercambiar recursos que mutuamente las benefician.".

Diversos autores han tipificado la cooperación entre las pequeñas empresas, en este estudio se utiliza la tipología que Araiza *et al.* (2010) construyeron y confirmaron empíricamente, la cual está basada en los esquemas clasificatorios de los tipos de cooperación empresarial de López y Lugones (1998), Escribá, Sánchez y Sánchez (2003) y Madero y Quijano (2006). Los tipos considerados en esa tipología son cuatro y están basados en las necesidades de la empresa que determinan el objetivo de la cooperación: cooperación para producir, cooperación para innovar, cooperación para mercado y cooperación para administrar y son definidos como sigue:

- *Cooperación para producir*: como vínculos de colaboración que se establecen para la obtención de economías de escala, disminuir costos y mejorar la calidad y productividad de las PyMES.
- *Cooperación para innovar*: como los vínculos de colaboración que se establecen entre las PyMES para disminuir riesgos, costos y tiempo principalmente asociados a propiciar y desarrollar su potencial innovador.
- *Cooperación para mercado*: vínculos de colaboración que se establecen entre las PyMES para la búsqueda y acceso a mercados; difusión, promoción y distribución de sus productos; obtención de economías de escala para acceder a mercados y reducción de costos.
- *Cooperación para administrar*: vínculos de colaboración que se establecen entre las PyMES para desarrollar la capacidad empresarial y tener conocimientos prácticos de gestión y acceso a información sobre instrumentos de crédito y financiamiento e incentivo fiscales así como efectuar el entrenamiento de trabajadores.

### Las Capacidades Tecnológicas

Las capacidades representan el conocimiento específico de la empresa, adquiridas a través de habilidades y experiencia individuales acumuladas a través del tiempo (Morrison, Pietrobelli y Rabellotti, 2008). Se han generado diferentes enfoques en el estudio para la determinación de los tipos de capacidades tecnológicas iniciando con la taxonomía desarrollada por Lall (1992), la cual incluye capacidades de inversión, producción y vinculación; aunque estas capacidades pueden estar interrelacionadas, en parte se sobreponen y son fuertemente interdependientes (Morrison et al. 2008).

Con base en el marco elaborado por Lall (1992), Bell y Pavitt (1995) desarrollaron un marco analítico de las Capacidades Tecnológicas Industriales, haciendo una distinción en el grado de innovación de las capacidades tecnológicas: nivel básico, nivel intermedio y avanzado. Velarde y Araiza (2011) trabajaron con una adaptación a la matriz de Bell y Pavitt (1995), donde en lugar de incluir la clasificación de las funciones de soporte, se deriva directamente en las capacidades de vinculación y las de fabricación y adaptación de maquinaria y equipo, habiendo trabajado con los siguientes conceptos, que de igual manera son utilizados en el presente estudio:

- *Capacidades de inversión*: habilidades e información necesaria para identificar proyectos de inversión viables, para localizar y comprar apropiadas tecnologías, para el diseño e ingeniería de la planta y para la dirección y ejecución del proyecto (Biggs et al., 1995).
- *Capacidades de producción*: habilidades y conocimiento necesario para la operación y mejoramiento de la planta o equipo adquirido por la firma (Biggs et al., 1995; Romijn, 1999).

- *Capacidades de vinculación*: conocimiento, habilidades y experiencia necesarios para el intercambio de información, tecnología y destrezas con otras empresas e instituciones (Bell y Pavitt, 1995).
- *Capacidades de fabricación y adaptación de maquinaria y equipo*: conocimiento, habilidades y experiencia necesarios para mejorar y modificar la tecnología existente y para la creación de nueva tecnología (Bell y Pavitt, 1995).

Derivada de la revisión bibliográfica efectuada para el presente estudio se plantean las siguientes hipótesis:

- H<sub>1</sub>: Las PyMES de la industria metalmecánica de la región centro del Estado de Coahuila que cooperan desarrollan mayores niveles de capacidades tecnológicas que las que no lo hacen.
- H<sub>2</sub>: Existe relación entre la cooperación interempresarial y las capacidades tecnológicas desarrolladas por las PyMES de la industria metalmecánica de la región centro del Estado de Coahuila.

### METODOLOGÍA

La estrategia metodológica, se basó en un estudio secuencial de dos fases con método mixto, en la primera fase se realizó una exploración cualitativa acerca de los tipos de cooperación interempresarial y de las capacidades tecnológicas, y en la segunda, se realizaron las encuestas (año 2007) entrevistando cara a cara a los empresarios de las 50 empresas que conformaron la muestra por conveniencia de una población de 153 empresas. Los datos cuantitativos obtenidos, se procesaron a través del paquete estadístico SPSS para medir, en base al grado de importancia otorgado por los empresarios (escala de 1 a 5, de menor a mayor), la cooperación interempresarial y las capacidades tecnológicas desarrolladas por las empresas. Para establecer si existe o no asociación entre las variables en estudio (cooperan o no las empresas y capacidades tecnológicas) primero se obtuvieron los niveles de desarrollo de las capacidades tecnológicas de las empresas, para lo cual se determinaron tres rangos de acuerdo al número de actividades llevadas a cabo por las firmas objeto de estudio: alto, medio y bajo, establecidos con puntos de corte a la misma distancia numérica unos de otros, para en segundo lugar, aplicar la técnica de Cross Tabs utilizando el estadístico coeficiente de contingencia. Enseguida para medir la relación entre la cooperación interempresarial y el desarrollo de las capacidades tecnológicas de las empresas se determinó el coeficiente Rho de Spearman para finalmente, efectuar las conclusiones y recomendaciones del estudio y definir las líneas futuras de investigación.

### RESULTADOS

Para comprobar la H<sub>1</sub>: *Las PyMES de la industria metalmecánica de la región centro del Estado de Coahuila que cooperan desarrollan mayores niveles de capacidades tecnológicas que las que no lo hacen,* se aplicó la técnica de *Cross Tabs* para establecer la asociación entre las empresas que si cooperan y las que no lo hacen con su nivel de desarrollo alcanzado para cada tipo de capacidades tecnológicas. Los resultados encontrados no muestran valores estadísticamente significativos a un nivel de confianza del 95% entre las empresas que cooperan o las que no lo hacen respecto al nivel de desarrollo de sus capacidades tecnológicas, excepto en las capacidades de vinculación, donde se encontró un coeficiente de contingencia de .538 con valores significativos a un nivel de confianza del 99%. Lo anteriormente expuesto permite aceptar parcialmente la H<sub>1</sub> ya que, sólo existe evidencia estadísticamente significativa para hacerlo en el caso de las capacidades de vinculación; este estudio no arroja evidencia suficiente para asegurar que exista una asociación entre las empresas que cooperan y las que no lo hacen con los niveles de desarrollo de las capacidades de inversión, las capacidades de producción así como las capacidades de fabricación y adaptación de maquinaria y equipo. Los resultados sobre las actividades de cooperación interempresarial

fueron reportados y discutidos por Araiza *et al.* (2010), por lo que en este estudio tan solo se retoman para, con base en los mismos, analizar en el siguiente apartado la relación de esta tipología de cooperación con el desarrollo alcanzado en los diferentes tipos de capacidades tecnológicas.

Para comprobar la H<sub>2</sub>: *Existe relación entre la cooperación interempresarial y las capacidades tecnológicas desarrolladas por las PyMES de la industria metalmecánica de la región centro del Estado de Coahuila*, se aplicó el coeficiente de correlación *Rho de Spearman*, los resultados encontrados muestran una correlación positiva alta (.794) y estadísticamente significativa a un nivel de confianza del 99% entre las capacidades tecnológicas y la cooperación interempresarial, lo cual confirma que a mayor cooperación entre las pequeñas empresas, mayor será el desarrollo de sus capacidades tecnológicas lo cual permite confirmar la H<sub>2</sub>.

### CONCLUSIONES

El presente trabajo de investigación se realiza en una muestra por conveniencia de pequeñas y medianas empresas de la industria metalmecánica de la región centro del estado de Coahuila, por tanto los resultados encontrados, se limitan a las empresas antes mencionadas. Lo encontrado sugiere que aún y cuando las capacidades de vinculación son las menos desarrolladas en las empresas del sector en estudio, las empresas que cooperan logran desarrollar niveles más altos de capacidades que las que no lo hacen, por tanto, la cooperación entre empresas pude ser utilizada como una estrategia que permite desarrollar las capacidades tecnológicas, haciendo a las empresas cada vez más competitivas. Los hallazgos muestran una correlación positiva alta v estadísticamente significativa, entre las capacidades tecnológicas y la cooperación interempresarial, lo cual confirma que a mayor cooperación entre las pequeñas empresas, mayor será el desarrollo de sus capacidades tecnológicas. De manera específica se encontró también, que en todos los casos, existe una correlación positiva, estadísticamente significativa, que permite afirmar que cada uno de los tipos de cooperación realizados por las empresas (para producir, para innovar, para mercado y para administrar), se relacionan con cada uno de los tipos de desarrollo de las capacidades tecnológicas (de inversión, de producción, de vinculación y de fabricación y adaptación de maquinaria y equipo) lo cual permite confirmar lo encontrado en la literatura en el sentido de que a mayor cooperación, mayor desarrollo de las capacidades tecnológicas.

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### RESUMEN

La presente investigación, pretende analizar los factores del capital humano que determinan la calidad del servicio posventa de las pymes del sector comercio automotriz. Es importante caracterizar el talento humano desde la perspectiva del trabajador, además de analizar el entorno donde se involucra, el ambiente interno, la cultura organizacional y el estilo de la administración donde se desempeña. El desarrollo de la investigación está basado en un diseño mixto, investigación cualitativa y también la aplicación de dos cuestionarios, el primero enfocado a conocer las características del trabajador y el segundo se basa en conocer la percepción de los clientes que solicitan el servicio posventa. Se analizan las principales teorías e investigaciones de autores enfocados al capital humano, donde se hace un énfasis especial en el modelo de capital humano del investigador Idalberto Chiavenato. Es necesario señalar que es un estudio descriptivo, correlacional, donde, se busca conocer qué factores del talento humano son importantes en las personas para ofrecer un servicio con calidad y que cumplan con las expectativas de los clientes, utilizando el instrumento SERVQUAL. El estudio se desarrolla en las agencias de autos nuevos del estado de Baja California, principalmente en las ciudades de Mexicali, Tijuana y Ensenada.

PALABRAS CLAVE: gestión del talento humano, calidad, servicio postventa, pymes, y capacitación.

### INTRODUCCION

La investigación es con un enfoque de diseño de investigación mixto, (investigación cualitativa y cuantitativa). El planteamiento del problema es conocer si existe relación entre los factores del capital humano y la calidad del servicio postventa de las pymes del sector comercio en el área automotriz de Baja California. La variable independiente es el capital humano, las dimensiones son talento humano y contexto. Según Idalberto Chiavenato, el Capital Humano está compuesto por dos aspectos principales: Los talentos; dotados de conocimientos, habilidades y competencias que son reforzados, actualizados y recompensados de forma constante y el contexto es el ambiente interno adecuado para que los talentos florezcan y crezcan. El contexto es determinado por aspectos como la cultura organizacional, diseño organizacional y el estilo de la administración. Los indicadores de talento humano son: 1.1) Conocimientos, 1.2) Habilidades, 1.3) Actitudes, 1.4) Valores. Los indicadores de contexto son: 2.1) Cultura Organizacional, 2.2) Diseño Organizacional, 2.3) Estilo de la administración.

La variable dependiente es la calidad del servicio. Ruiz V. (1996) menciona que según Parasuraman, Zeithaml y Berry (1988) definen a la calidad del servicio como un juicio global del consumidor, relativo a la superioridad del servicio, que resulta de la comparación realizada por los clientes entre las expectativas sobre el servicio que van a recibir y las percepciones de la actuación de las organizaciones prestadoras del servicio y Gronroos (1994). Las dimensiones de la percepción de la calidad del servicio, son las del modelo SERVQUAL: elementos tangibles, la fiabilidad, capacidad de respuesta, seguridad, y empatía. Se limita al área de servicio de las 37 agencias automotrices del estado de Baja California, México, durante el periodo 2012.

### **REVISION LITERARIA**

### **CAPITAL HUMANO**

Chiavenato (2009), refiere que hablar del recurso humano en las empresas, implica saber que representa realmente el capital humano. Es por eso que entender que significa capital humano es indispensable para el presente trabajo de investigación. "El término capital humano apareció por primera vez en Investment in human capital, un articulo del premio nobel en economía Theodore W. Shultz publicado en 1961 en la American Economic Review. Desde entonces, los economistas han cargado muchos términos la maleta actual del capital humano. La mayoría coinciden en que el capital humano comprende habilidades, experiencia y conocimientos. Algunos, como el economista Gary Becker (otro premio nobel), añaden personalidad, experiencia, reputación y credenciales. Y todavía otros, como el consultor de gestión Richard Crawford, equiparan al capital con sus propietarios señalando que el capital humano consiste en personas hábiles e instruidas." (Davenport, 2000).

Según el Profesor Idalberto Chiavenato 2009, el Capital Humano está compuesto por dos aspectos principales: Los talentos; dotados de conocimientos, habilidades y competencias que son reforzados, actualizados y recompensados de forma constante. Y el Contexto; Es el ambiente interno adecuado para que los talentos florezcan y crezcan. El contexto es determinado por aspectos como la cultura organizacional, diseño organizacional y el estilo de la administración. Las funciones de recursos humanos en la actualidad son estratégicamente desarrolladas en las empresas exitosas. El término de capital humano se refiere a la suma de los conocimientos que poseen los empleados y que le dan una ventaja competitiva a la organización. La importancia de las actividades de recursos humanos se hace evidente cuando se toma conciencia de que los seres humanos constituyen un elemento común a toda organización, en todos los casos son hombre y mujeres quienes crean y ponen en práctica las estrategias e innovaciones de sus organizaciones. Debemos tener muy en cuenta que los recursos materiales hacen las cosas posibles, pero las personas las convierten en realidades.Es esencial considerar que el tamaño de los departamentos de capital humano varía dependiendo en gran medida de las dimensiones de la empresa.

Rodríguez (2005), menciona la importancia de las pequeñas y medianas empresas en la actualidad, ya que proporcionan la mayor parte de los empleos en el país. También ofrecen el campo experimental para generar, con frecuencia, los nuevos productos, ideas, técnicas y formas de hacer las cosas.

Careaga Viliaesid J.A. (2008), explica que existen tres aspectos donde la pequeña y mediana cumplen una función definida dentro del desarrollo general de un país, específicamente en el proceso de industrialización.

- a) Llenar los huecos de la producción.
- b) Crear y fortalecer una clase empresarial.
- c) Proporcionar mayor número de empleos.

La generación de empleos para una población creciente es uno de los más grandes problemas del Estado Mexicano. El incremento de la productividad en el campo y el cambio de estructuras en las actividades, que son las características esenciales del proceso de desarrollo, establecen una fuerte presión demográfica sobre las áreas urbanas, parte de esta población encuentra acomodo en los servicios pero requiere de la industria una aportación significativa en este aspecto. Hablando de Administración de persona, representa un gran problema, la realidad es que existe una actitud muy pasiva en el manejo del personal. El estudio indicó que en reclutamiento, selección, contratación y capacitación se aplican soluciones informales. Sobre la Ley de capacitación hay gran escepticismo. La falta de conocimientos técnicos sobre administración da lugar a unas consecuencias considerablemente más graves en este tipo de empresas que en las grandes.

Anzola (2010) menciona las principales características de las pequeñas empresas, En la Administración: El dueño, debido a las múltiples actividades que desempeña, tiene todo el control y la responsabilidad. Mientras que los miembros de la familia ocupan los puestos principales. Es común que en pequeñas empresas no se sepan deslindar los asuntos familiares de los empresariales, lo cual provoca muchos conflictos dentro de esta. Los elementos que se cuentan como inicio de la pequeña empresa normalmente son por herencia familiar, por la compra de una empresa en operaciones, emprender un nuevo negocio o la fusión con otra empresa. En ninguno de estos casos, el pequeño empresario realizo estudios de factibilidad, producción, investigaciones de mercado ni económicas, sino principalmente en presentimientos y suerte. Existen dos razones que determinan el éxito al inicio de operaciones de las pequeñas empresas: 1) La habilidad y capacidad que desarrolla el empresario para emprender su negocio, guiado principalmente por su corazonada.2) El deseo inmenso que manifiesta de tener su propia empresa.

Aquí el compromiso, el espíritu de emprender y la inventiva son elementos que siempre están presentes. En el área de Recursos Humanos, el empresario en pequeñas empresas es conservador y empírico, toda la dirección de su empresa la basa en el conocimiento derivado de su experiencia acumulada, rechaza cualquier intromisión en sus actividades y no se apoya de ninguna técnica que fundamente sus decisiones de planeación y control, especialmente de carácter cuantitativo. En esta área los candidatos son buscados donde sea, y al encontrarse, se les pone a trabajar de inmediato y la manera en que reciben su entrenamiento es sobre la marcha y bajo supervisión del dueño o de la persona que este asigne.

Ferrell (2008), explica que es difícil definir a la pequeña empresa, ya que la pequeñez es relativa. La define como una compañía de operación y propiedades independientes, que no domina el área de su competencia ni emplea a más de 500 personas. Menciona también que sin importar como se defina a las pequeñas empresas, un hecho ésta claro: son vitales para la solidez de la economía estadounidense, ya que más del 99% de las compañías estadounidenses las cuales brindan empleo al 53% de los trabajadores del sector privado. Además, son en gran parte la fuente de la creación de empleos e innovación. Las pequeñas empresas, también brindan oportunidades de éxito empresarial a mujeres y miembros de grupos minoritarios. De acuerdo a Albizu (2001), es importante señalar la aceptada relación entre el entorno y la estructura de la empresa, que nos lleva también a la necesidad de relacionar el diseño de la organización y el comportamiento de las personas en la empresa. Una de las principales responsabilidades del departamento de recursos humanos en cualquier organización, es la aportación de nuevas estrategias a la estructura organizacional. También menciona que se debe analizar al recurso humano y la relación con la cultura de una organización, junto con los procesos que lo alimentan, siendo una de las partes más importantes del proceso de análisis interno previo a la formulación estratégica, dada la gran responsabilidad que tienen estos elementos de la empresa en la generación y mantenimiento de la ventaja competitiva que le permita sobrevivir y alcanzar sus objetivos.

De acuerdo a Casado (2003), El servicio debería estructurarse en función de las necesidades de sus clientes internos, de acuerdo con una serie de criterios y políticas del departamento de Recursos Humanos, conectados con la estrategia del negocio y las necesidades del entorno. Para ello, hay que conocer y gestionar los resultados del área de Recursos Humanos, así como los mecanismos de gestión interna, esto se debe medir a través de indicadores que permitan valorar la excelencia del servicio y mejorar las prestaciones. Para lo cual es menester contemplar al menos lo relacionado con:

- Clientes: Miden la calidad del servicio y la satisfacción del usuario o cliente interno.
- Resultados: Miden la actividad y eficiencia interna.
- Organización: miden la evolución y capacidad de mejora.

Es importante señalar que los indicadores señalados anteriormente, deben emanar de los objetivos que aparezcan en el cuadro de mandos de la empresa.

### CALIDAD EN EL SERVICIO

En relación al origen de la palabra calidad, Maqueda, J (1995) menciona lo siguiente: en todos los idiomas expuestos, la etimología de los términos cualidad y calidad nos remonta al latín del adjetivo relativo e interrogativo qualis (qualitas-qualitatem) como término imprecador (<cuál>, <tal como>, <de qué clase>; el modo de ser correspondía rigurosamente a talis) que demanda la esencia, contenido o características de las personas y de las cosas. En las primeras civilizaciones de la humanidad se hacia referencia a la calidad, Miranda, F.J. (2007) expresa que la preocupación del ser humano por la calidad se remonta a la antigua Babilonia. Así queda constancia en el código de Hammurabi (1752 AC) que "si un albañil construye una casa para un hombre, y su trabajo no es fuerte y la casa se derrumba matando al dueño, el albañil será condenado a muerte" Se ha considerado que los principales teóricos que propiciaron el desarrollo del movimiento hacia la calidad son: Deming, Juran, Ishikawa y Crosby, quienes desplegaron sus teorías a partir del mejoramiento del control de la calidad y del trabajo en equipo para lograr un alto nivel de productividad. Anda C. (2004)

Irónicamente, uno de los líderes de la revolución industrial, Henry Ford, desarrollo a principios del siglo XX muchos de los fundamentos de la gestión de la calidad total. Cuando en 1982 los ejecutivos de Ford visitaron Japón, para estudiar las practicas de administración japonesas, cuenta la historia que un ejecutivo japonés hacia tantas referencias <<a>al libro>> que el personal de Ford descubrió que se trataba de la traducción al japonés de <<My Life and Work>> escrita por Henry Ford y Samuel Crowhter en 1926. <<El libro>> se había convertido en una especie de Biblia industrial en Japón, mientras que la empresa Ford se había alejado de sus principios. Miranda F. (2007) En función de los modelos y normas disponibles y de sus características propias, cada organización puede adoptar un determinado sistema de gestión de la calidad, esto es, un conjunto estructurado de instrumentos complementarios (normas, modelo de gestión de la calidad, herramientas, códigos éticos, cartas de servicios, sistemas de auditoria y certificación, etc.), que le permitan gestionar la calidad de la mejor manera posible.

Carro J.C. (2008) Se necesita que cada organización defina los conceptos que darán estructura a la filosofía que apoyara a la organización en la búsqueda del mejoramiento. Podemos elegir entre varias opciones. Existen filosofías orientadas principalmente al usuario como es la planteada por Ishikawa; orientadas al producto, como es la propuesta por Crosby; o para obtener evidencia estadística de los procesos como propone Deming. Anda C. (2004) Hoy en día el tema de calidad del servicio tiene bastante importancia en las organizaciones, satisfacer las necesidades y gustos del cliente no es tarea fácil. Sin embargo las organizaciones apuestan por cumplir con los requerimientos que exige el cliente, con la finalidad de lograr la fidelidad del consumidor hacia la empresa. El servicio es el conjunto de prestaciones que el cliente espera (además del producto o del servicio básico) como consecuencia del precio, la imagen y la reputación del mismo. Para ofrecer un buen servicio hace falta algo mas que la amabilidad y gentileza, aunque estas condiciones son imprescindibles en la atención al cliente. Vértice (2008) Los bienes y servicios de alta calidad proporcionan a una empresa una ventaja sobre la competencia. La alta calidad reduce los costos que resultan de devoluciones, reproceso y mermas; incrementa la productividad, utilidades y otras medidas del éxito. Algo muy importantes es que la alta calidad genera clientes satisfechos, quienes recompensan a la organización con un patrocinio continuo y publicidad verbal favorable. Evans, R. (2008)

Cuando un cliente valora la calidad de un servicio, no disocia todos sus componentes, sino que la juzga como un todo. Lo que prevalece, por tanto, es la impresión de conjunto y no el éxito relativo de una u otra acción especifica. Vértice (2008) Las personas cambian constantemente de gustos, preferencias y exigencias, entonces las organizaciones deben de identificar las necesidades puntualizadas que requiere el

cliente para poder cubrir sus peticiones. El empleado que otorga el servicio, debe hacer buen uso de su comunicación verbal, y no verbal.

### Evaluacion De La Calidad Y El Modelo Servqual.

Las evaluaciones a través de las percepciones de los clientes, consumidores, usuarios o pacientes en la actualidad, son de uso muy frecuente, por parte de organizaciones, tanto privadas como públicas, de muy diversos sectores, incluido el ámbito sanitario. Los índices de calidad y de satisfacción, conforme el demandante es el juez final e inapelable de la gestión, constituyen uno de los principales activos sobre los cuales se basan las posibilidades de sostener la rentabilidad y el crecimiento de las empresas, o la confianza del ciudadano en los servicios que se le ofrecen. Lo que revelen las evaluaciones a través de las percepciones, ha de determinar en muy buena medida la capacidad competitiva de las empresas. Botero, M. (2006)Los requisitos de competitividad y universalidad del mercado actual han convertido a los sistemas de gestión de la calidad en algo, además de recomendable, obligatorio, ya que aporta un punto de fiabilidad y seguridad indudable a los clientes. De esta situación no está exento el ámbito de la Inteligencia Empresarial, donde la realización de servicios y productos de calidad.

Carro J.R. (2008) Existen múltiples normas, estándares y sistemas de calidad, dependiendo estos de la industria, del sector, de la región y el país. Como ejemplos de modelos de gestión de la calidad aplicables a las organizaciones en general se pueden mencionar: el Modelo EFQM de Excelencia, el Cuadro de Mando Integral (Balanced Scorecard) (una herramienta más que modelo), el Modelo SERVQUAL, el Marco Común de Evaluación (Common Assessment Framework), la estrategia Seis'Sigma (m-as nna estrategia para corregir defectos), las normas BS (del Reino Unido), las normas ISO, entre otros. Carro J.R. (2008) El modelo servqual propuesto por Parasuraman, Zeithaml y Berry, en los años ochentas en Estados Unidos, mide la calidad del servicio en las organizaciones comparando la diferencia entre las expectativas, es decir lo que el cliente espera recibir del servicio y las percepciones, se refiere a lo que el cliente percibe al momento de tomar el servicio.

Setó (2004) expresa que una primera versión de la escala servqual incorporó diez dimensiones, incluyendo 97 ítems, también investigaciones posteriores, aplicando la escala en diferentes tipos de servicios, indicaron la necesidad de eliminar algunos de los ítems y varias de las dimensiones propuestas en un primer momento, obteniendo como resultado una escala modificada que contiene 22 ítems agrupados en cinco dimensiones: fiabilidad, tangibilidad, capacidad de respuesta, seguridad y empatía. Ruiz de Maya (2006) hace referencia a la definición de cada una de las dimensiones propuestas por Parasuraman, Zeithaml y Berry. La fiabilidad es la capacidad para prestar el servicio prometido de forma fiable y cuidadosa, la tangibilidad o elementos tangibles es la apariencia de las instalaciones físicas, equipos, personal y material de comunicación, la capacidad de respuesta es la disposición y voluntad para ayudar a los usuarios a proporcionar un servicio rápido, la seguridad son los conocimientos y atención mostrados por los empleados y sus habilidades para inspirar credibilidad y confianza, y la empatía es la atención individualizada que prestan las organizaciones a sus consumidores.

De la Antonia (2009) manifiesta que el modelo distingue dos zonas: en la parte superior recogen aspectos relacionados con el cliente o usuario, el cual en función de sus necesidades personales, sus experiencias previas y las informaciones que ha recibido, se forma unas expectativas sobre el servicio que va a recibir. La parte inferior corresponde al servicio que va a recibir e incluye fenómenos relativos al proveedor del servicio, concretamente se expone como las percepciones de los directivos sobre las expectativas del cliente guían las decisiones que tiene que tomar la organización sobre las especificaciones de la calidad de los servicios en el momento de su comunicación y entrega.

### Capital Humano Y Calidad En El Servicio

El servicio es brindado por los integrantes de la organización, hacia el cliente. El servicio es intangible, no se puede tocar, sin embargo es perceptible, se percibe a través de los sentidos del ser humano, el cliente distingue si esta recibiendo un servicio de calidad por parte de la persona que brinda el servicio, ya sea el empleado o el directivo, o si no recibió un buen servicio. Todos los signos, verbales o no, que acompañan el servicio, tienen un papel fundamental en este sentido: mirar al cliente a la cara, cederle el paso, expresar con una sonrisa el placer que nos produce verlo, llamarlo por su nombre, son otras de las ventajas para ofrecer un servicio de calidad que tenga por objeto la conquista del cliente. Vértice (2008) El servicio indudablemente, depende de la persona que lo está brindando, es decir, del capital humano de la organización. Los miembros de la organización, son elementos clave para que el servicio sea todo un éxito. En el área de atención a clientes, es importante contar con personal capacitado y calificado, que pueda dar una buena percepción del servicio a los consumidores.

Con demasiada frecuencia, en la búsqueda afanosa por conseguir la satisfacción de los clientes olvidamos a los empleados. En realidad, la satisfacción que puedan sentir los empleados para con la empresa esta en relación directa con la de los clientes. De ahí que la lección que deben aprender las empresas de servicios es que si quieren que las necesidades de sus clientes estén primero, entonces, no pueden relegar las de sus empleados en último lugar. Las encuestas para los empleados, realizadas trimestralmente, proporcionan una medida interna de la calidad de los servicios en lo que respecta al estado de animo y la actitud de los empleados, así como a los obstáculos que perciben para brindar servicios de calidad.

Hoffman (2002) Alcalde (2010) enuncia que se estima más del 20% de los clientes que se retraen de adquirir un producto o servicio lo hace por fallos en la información o atención por parte de las personas encargadas de atender y motivar a los compradores. Ante esta circunstancia es necesario que la atención al cliente sea de la mas alta calidad con la información concreta y precisa de modo que la persona que recibe la información no solo tenga una idea de un producto, sino también de la calidad del capital humano y técnico con el que va a establecer una relación comercial. Blanco (2005) manifiesta que para el cumplimiento de los estándares de calidad en la prestación del servicio, desde el proceso de selección de las personas, se deben reconocer los aspectos relacionados con sus cualidades. La norma ISO9001, versión 2000 plantea las siguientes estrategias a considerar para lograrlo:

- 1. Identificar las competencias que requiere el personal para desarrollar adecuadamente las actividades que afectan la calidad.
- 2. Capacitar y brindar entrenamiento al personal para satisfacer esas necesidades.
- 3. Evaluar la efectividad de la capacitación y entrenamiento.
- 4. Asegurar que los empleados sean conscientes de la relevancia e importancia de sus actividades y como estas contribuyen para el cumplimiento de los objetivos de calidad.
- 5. Mantener registros adecuados de educación, experiencia, entrenamiento y habilidades.

Los negocios de menor escala, son más capaces de proveer un servicio de calidad a sus clientes cuando las capacidades humanas les permiten responder de mejor manera a las necesidades de los clientes, pero es importante reconocer que el capital humano por si mismo no produce riqueza, ésta se logra cuando la estructura social y el proceso organizacional articula al capital humano y otros recursos para producir y distribuir bienes y servicios que demanda el mercado, por ello es muy importante referirse al capital organizacional. Martin, M.M. (2006) Existen criterios y preferencias por parte de los usuarios que determinan cuando un servicio es de calidad y cuando no. A pesar de que estas determinantes podrían ser momentáneas, lo que hace que los resultados de la investigación no se puedan generalizar en el tiempo, las mismas muestran una tendencia que orienta a la gestión de recursos humanos, específicamente la de

los procesos de selección, capacitación y evaluación, hacia una gestión por competencias. Guerra, M.K. (2010)

### METODOLOGIA

Se propone un diseño mixto, investigación cualitativa, y la aplicación de un cuestionario a través de investigación cuantitativa y finalmente que se realice una profundización y evaluación de los resultados a través de investigación cualitativa. Es un estudio descriptivo, correlacional.

### RESULTADOS

La investigación se limita a las 37 agencias automotrices del estado de Baja California, México, durante el periodo 2012. Las unidades de análisis son los trabajadores del departamento de servicio y los clientes que acuden al departamento de servicio. El promedio de trabajadores de cada agencia en el área de servicio es de 15 a 20. Los resultados esperados son conocer las características del talento humano del personal que trabaja en el departamento de servicio de las pymes del sector comercio en el área automotriz de Baja California no se encuentran identificadas claramente, las características del contexto del departamento de servicio del sector comercio en el área automotriz de Baja california no son las adecuadas para desarrollar las actividades, identificar la percepción de la calidad del servicio posventa por parte de los clientes, comparar la relación entre los factores del capital humano y la calidad del servicio posventa.

### CONCLUSIONES

En la práctica se pretende que ésta investigación sirva de apoyo a las organizaciones en el área de servicio postventa, con el fin de aportar información relevante a los líderes para la toma de decisiones. Como aporte a la metodología, se espera que el instrumento sea válido y confiable, para que sirva de apoyo en la medición de las variables como los factores de capital humano y la calidad del servicio.

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## MODELO DE NEGOCIO DE LAS MIPYME: UN ANÁLISIS DESDE LA PERCEPCIÓN DE DIRECTIVOS DE LA COMARCA LAGUNERA

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### RESUMEN

La micro, pequeña y mediana empresa (MIPYME) ha sido en los últimos años el centro de atención de numerosos trabajos de investigación, no obstante, aún siguen necesitadas de fundamentos estratégicos, operativos y de alianzas que, de forma continua, le brinden oportunidades para mejorar su competitividad. Este Laboratorio Empresarial realiza estudios regionales dentro del Estado de Coahuila, entre ellos el auto - diagnóstico del modelo de negocio y la definición de estrategias de cambio, diseña estrategias cooperativas de innovación ofreciendo un sitio de conexión virtual entre la empresa y universidad. El objetivo del trabajo es mostrar los resultados alcanzados en el diseño y validación del modelo de negocio para las MIPYME. La metodología contempla un estudio documental y validación con método de expertos del modelo de negocio diseñado, así como la indagación empírica, mediante una encuesta a directivos de 48 MIPYME de la Comarca Lagunera. Los resultados evidencian similitud entre la percepción sobre funcionamiento de la empresa y el Modelo de Negocios diseñado, las relaciones positivas entre cada componente y sus elementos; las contrastaciones significativas entre las variables de propuesta de valor y resultados económicos. La evaluación realizada permite definir estrategias para mejorar el desempeño económico y social de las MIPYME

**PALABRAS CLAVE:** Modelo de negocio, estrategias de cambio, competitividad, estudios regionales, cooperación.

### SMES BUISNESS MODEL: AN ANALYSIS FROM THE PERCEPTION OF MANAGERS OF THE LAGUNA REGION

### ABSTRACT

The micro, small and medium enterprises (SMEs) has in recent years been the focus of numerous research projects, however, are still in need of strategic foundations, and operational alliances, continuously, will provide opportunities for improve their competitiveness. The Business Lab regional studies performed within the State of Coahuila, including self - diagnostics business model and the definition of strategies for change, innovation design cooperative strategies site offering a virtual connection between the company and university. The objective of this work is to show the results achieved in the design and validation of the business model for SMEs. The methodology includes a desk study and expert validation method designed business model and empirical inquiry, through a survey of 48 SME managers in the Laguna Region. The results show the perceived similarity between running the business and business model designed, positive relationships between each component and its elements to tests between variables significant value proposition and economic performance. The evaluation to define strategies to improve the economic and social performance of SMEs.

**KEYWORDS**: Business model, strategies change, competitiveness, regional studies, cooperation.

#### **JEL:** O41

### INTRODUCCIÓN

Un elemento importante pero generalmente poco manejado en las MIPYME es el relacionado con el Modelo de Negocios, muchas veces enmascarado o confundido dentro de los Planes de Negocio o dentro de los Sistemas de Emprendedores. En el año 2010, al dirigir a su público a través de su web la pregunta: "¿Su empresa cuenta con un modelo de negocio establecido por escrito?" (Michavila, 2010) detecta que el 77 por ciento de los participantes respondieron negativamente, lo cual no nos sorprende pero no deja de ser alarmante. Básicamente un modelo de negocios nos indica de qué se trata nuestro negocio, en que se diferencia de los competidores y cómo va a generar ingresos mediante sus ventajas competitivas.

### **REVISIÓN DE LA LITERATURA**

#### Modelos De Negocios

Existen muchas definiciones de modelo de negocio: Algunas van en la línea de "una narración de cómo funciona la empresa", otras hablan de actividades y cadena de valor, las más recientes se centran en elecciones o respuestas a preguntas claves. Habitualmente el trabajo sobre modelos de negocio se basa en conceptualizaciones estáticas de sus elementos y de las interrelaciones entre estos y con el exterior. No se pueden olvidar aspectos dinámicos que resultan decisivos para el desarrollo y el éxito final de nuevos modelos (Matarranz, A. 2011). La esencia de un modelo de negocio de éxito es un diseño lógico, que abarque todos y cada uno de las límites de la empresa. Un modelo de negocio de éxito es aquel que garantiza creación de valor para todas las partes implicadas al tiempo que mantiene el foco en la empresa. (Zott, Ch. & Amit, R.). Para (Osterwalder y Pigneur 2010), un modelo de negocio describe el fundamento lógico de cómo una organización crea, entrega y captura valor. Su enfoque ha popularizado una representación de los modelos de negocio a través del Modelo de Negocio de Canvas: Segmentos de Clientes, Propuesta de Valor, Canales, Relaciones con Clientes, Corrientes de Ingresos, Recursos Clave, Estructura de Costes, Actividades Clave, Alianzas Clave.

Sin embargo, es importante recalcar que (Puhakainen y Malinen 2009) aseguran que los modelos negocio estáticos pueden ser peligrosos. Los modelos de negocio existentes pueden y deben ser adaptados al contexto estratégico de la PYME como un proceso dinámico y continuo, en lugar de la creación de un artefacto, dicho proceso debe producir varias sub estructuras en lugar de un modelo estático. Los autores y expertos consultados coinciden en que el conjunto de los MN analizados adolecen de una serie de aspectos que limitan o impiden una adecuada aplicación en nuestro entorno de MIPYME mexicana; estas limitaciones son: La generalidad de los modelos estudiados no están diseñados para las MIPYME; la mayoría no tienen un enfoque prospectivo sino que trabajan analizando el pasado; las preguntas que se formulan adolecen de profundidad, alcance, cantidad y calidad; no ofrecen alternativas de solución, sólo se enfocan al diagnóstico; son modelos estáticos; no existe un "coach" que le auxilie a hacer su autoevaluación; no existe una versión montada sobre una plataforma on line que le permita hacer su autoevaluación en el momento y el lugar que desee; no consideran las alianzas con los agentes del entorno como importantes y por tanto no hay presencia de la relación universidad-empresa en sus preguntas y concepciones; la gestión por competencias no aparece reflejada y es una de las claves actuales para el proceso innovador. La generalidad de la información que aparece en la literatura científica como referencia y en la web son sobre el Modelo de Negocio de Canvas lo que hace que la mayoría de la divulgación gire sólo en torno a este Modelo.

Dados estos antecedentes, los autores coinciden en que se debe diseñar un Modelo de Negocio propio para nuestra región que incluya una propuesta innovadora al asociarlo con los Modelos de Calidad.

### METODOLOGIA

Los componentes del modelo de negocio seleccionados se obtuvieron a partir de una amplia consulta de modelos de competitividad y de calidad, (IMCO, 2011), (IFCT, 2011), (EFQM, 2010), (FUNDIBEQ, 2011), (Gutiérrez, 2011), (Jennings y Beaver, 1997), tanto de referencias mexicanas como internacionales. Se consultaron además los criterios y opiniones de empresarios exitosos de nuestra región, así como de académicos, en calidad de expertos (30 en total), a partir de todo esto se alcanza una adecuada validez de constructo y contenido. Para comprobar la concordancia de los expertos entre los componentes y sus 28 variables se empleó el Test Exacto de Fischer dado que para frecuencias mínimas esperadas inferiores a 3 se debe aplicar éste en lugar de Spearman o Yates. Ya para la prueba de campo la investigación es correlacional en cuanto a que busca entender el efecto de una serie de variables independientes en los resultados y permanencia del funcionamiento y competitividad de las PYME. El procesamiento de datos se realizó con estadígrafos descriptivos y la contrastación de variables cualitativas mediante estadística no paramétrica por medio de la prueba de Kruskal-Wallis; previamente se comprobó la aleatoriedad de la muestra por la Prueba de Rachas y la normalidad de las variables por el estadístico de contraste Prueba de Kolmogorov-Smirnov, para una muestra.

### RESULTADOS

Atendiendo a la validez de contenido y de constructo del MN -a través de los expertos- se incorporan como Componentes del Modelo de Negocio: Propuesta de Valor, Relaciones con Clientes, Alianzas, Ejecución de la Propuesta de Valor y Resultados y se comprueba la Hipótesis  $H_1$  "*Las respuestas de los expertos acerca de la asociación componente-elemento es homogénea*". Se comprueba además en la prueba de campo la Hipótesis  $H_2$ . *La introducción de nuevos y mejorados productos y servicios tiene un efecto positivo con los resultados empresariales*. Tabla 1.

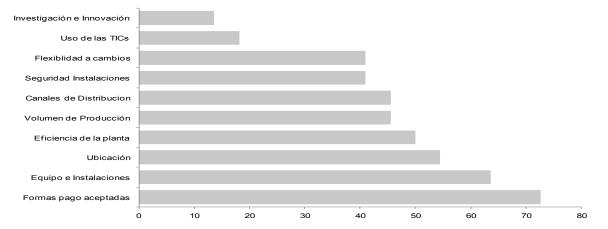
	E22 VENTAS	E27 SATISFACCION DE CLIENTES	E9 RETENCION DE CLIENTES	E23 FACTURACION	E24 UTILIDADES
Chi-cuadrado	2,784	3,953	1,614	4,608	4,784
gl	2	2	2	2	2
Sig. asintótica	,249	,139	,446	,100	,091 *

Tabla 1: Innovación VS Resultados empresariales.

*Elaboración propia por medio del SPSS para pruebas no paramétricas. Estadísticos de contraste: Prueba de Kruskal-Wallis para tres elementos. Variable de agrupación El Innovación. Precisando un valor de la significación con \alpha = 5\%, P > 0,05 (\*\*) y \alpha = 10\%, P > 0,10 (\*)* 

Por extensión podemos concluir que según el grado de introducción de nuevos y mejorados productos o servicios que tengan las empresas estudiadas, estos tendrán significación con el nivel de las ventas, la satisfacción, la retención de clientes y la facturación, pero no así con las utilidades. O sea, en la medida que la empresa introduce nuevos y mejorados productos hay un efecto positivo sobre los resultados empresariales, según la percepción de sus empresarios exceptuando en las utilidades. Por tanto se cumple la Hipótesis H2 para 4 de los 5 Elementos.

Figura 1: Opinión de los empresarios en porcentaje respecto a en qué reside la diferencia de su negocio con la competencia.



Elaboración propia a partir de las respuestas de los 48 empresarios, independientemente del tamaño de la empresa y el sector

Es lamentable el poco uso de las TICs en estas MIPYME de la Región Lagunera, así como el no tener

# CONCLUSIONES

Hemos querido en esta primera presentación de resultados del Modelo de Negocio partir de las respuestas más generales, sin diferenciarlas por sector y tamaño para en función de estas generalidades ir conformando posteriormente determinadas estrategias que luego se puedan ir particularizando por sectores y tamaños. Entendemos que es un adecuado enfoque el trabajar de lo general a lo particular. El modelo de negocio se caracteriza por una solución innovadora al combinar los principios de los Modelos de Calidad con los Modelos de Negocio auxiliados por un SI creando un procedimiento original que permite no sólo diagnosticar la situación de la PYME sino que se le brindan alternativas estratégicas y se le ofrece al apoyo mediante "*coaching*" por parte de alumnos y profesores de nuestra Facultad.

En muchos casos de innovación la clave no está tanto en el propio producto como en un nuevo modelo de negocio que lo sustente La entrevista directa al empresario (o al este acceder a nuestra web) logra que él exponga cómo hace o percibe su labor de dirección y cómo él aprecia que está su empresa en relación a los parámetros que parecen ser comunes en las organizaciones, mismos que nuestro Modelo de Negocio los tiene establecidos, siendo este el punto de referencia que empleamos para calificar el grado de similitud que existe entre la percepción del empresario y nuestro Modelo.

Es por ello que afirmamos que el nuestro es una guía para evaluar el Modelo de Negocios de una PYME bajo los conceptos y premisas de los Modelos de Calidad. Evidentemente que la percepción que el empresario nos brinda con sus respuestas puede estar alejada de su realidad tangible y es por ello que se debe pasar a un segundo nivel donde se logre contrastar de manera objetiva qué tanta distancia hay entre su percepción y la realidad, esto último es tema de continuación de esta actividad científica y el foco central del trabajo de Laboratorio Empresarial que estamos diseñando. Afirmamos –de manera general-que se detectan fallos en aspectos claves para la estabilidad de las empresas que vienen relacionadas con problemas en la cartera de clientes, manifestada por bajos resultados en la selección y crecimiento de estos, el no tener aún definido segmentos de clientes que se sientan atraídos por su empresa ocasiona que no se pueda definir una estrategia de actuación hacia ellos y por tanto sea difícil que se puedan convertir en clientes fijos. Se observan bajas alianzas verticales y casi nulas en las institucionales: las alianzas con proveedores y clientes son la clave de los negocios de éxito, insuficientes alianzas impedirán incursionar

en nuevos escenarios, disminuir riesgos y eliminar competidores así como alcanzar economías de escala. Se detectan además problemas con la calidad y un bajo trabajo en equipo, a todo se une que la planeación se realiza con generalidad para períodos de un año o sea, sólo planeación operativa y ausente la planeación estratégica y táctica.

La pobre estrategia financiera da como resultado que ella no tenga correspondencia con las utilidades. No se considera el tema de protección ambiental como prioritario ni tampoco el uso de las TICs y mucho menos de la Investigación e Innovación, aunque generalmente todos los empresarios plantean su positiva introducción de nuevos y mejorados productos y servicios, todo hace pensar que existen errores conceptuales en lo que realmente es la innovación. Actualmente se brinda un Servicio científico técnico permanente de la universidad para el diagnóstico, con enfoque de administración estratégica, del Modelo de Negocios de las PYME, on line o presencial, que identifica las áreas de oportunidad que contribuyen a incrementar de forma sostenible su competitividad y fomentar la cultura de la innovación y la cooperación, mediante el diseño de una Aplicación Web, que se programó en un ambiente cliente servidor, con un desarrollo en plataforma ejecutada sobre php y MySql, con acceso controlado y alojada en el sitio de internet de la Facultad de Contaduría y Administración de la Universidad Autónoma de Coahuila, Unidad Torreón en México.

Es importante puntualizar el interés del equipo de investigadores del Laboratorio Empresarial, de incorporar al modelo un enfoque dinámico, considerando que las capacidades dinámicas en los modelos de negocios, "se representan como la piedra angular de la competitividad y la capacidad de adaptación de los conductores y la innovación en las empresas" (Eisenhardt y Martin, 2011). Por ello, el enfoque futuro del Modelo de Negocio de las PYME de la Comarca Lagunera apunta hacia un modelo dinámico. La innovación de un modelo dinámico, apropiado permitirá a las PYME como señala (Teece, Pisano y Shuen 2011), la capacidad de integrar, construir y reconfigurar competencias internas y externas para hacer frente rápidamente a los cambios del entorno.

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# PERCEPCIÓN ESTUDIANTIL DE LA CALIDAD DEL SERVICIO EDUCATIVO EN EL BACHILLERATO

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### RESUMEN

El Objetivo General de esta investigación es analizar las dimensiones clave relacionandas con la percepción de los alumnos de la calidad del servicio educativo en la Educación Media Superior. Del examen conjunto de las diferentes partes del objeto de estudio y de la evidencia empírica se obtienen conclusiones relevantes que pueden contribuir a diseñar e implementar líneas de mejora en las actuales estrategias de calidad en el nivel de educación pre-universitaria. Se ajustaron los conocimientos previos como la adaptación de la escala SERVQUAL y SERVQUALing. Se utilizó el método estadístico multivariable: regresión múltiple y reducción factorial, complementado con pruebas de validez y fiabilidad, apoyado en el software SPSS. Una de las aportaciones más importantes de esta investigación es adaptar un instrumento cuantitativo con el fin de apoyar a la planeación estratégica institucional del Colegio de Bachilleres y la mejora continua del servicio educativo medio superior.

PALABRAS CLAVE: Servqual, Servqualing, satisfacción del cliente.

# STUDENT PERCEPTION OF SERVICE QUALITY EDUCATION IN THE HIGH SCHOOL

### ABSTRACT

The general objective of this research is to analyze the key dimensions relacionandas with student perceptions of the quality of education in School Education. After examining all the different parts of the object of study and the empirical evidence obtained relevant conclusions that can help design and implement areas for improvement in current quality strategies in the level of pre-university education. Were adjusted prior knowledge and adaptation of the SERVQUAL scale and SERVQUALing. We used multivariate statistical method: multiple regression and factor reduction, supplemented with evidence of validity and reliability, supported by SPSS software. One of the most important contributions of this research is to adapt a quantitative instrument to support institutional strategic planning of the College of Bachelors and continuous improvement of the higher average educational service.

**JEL:**123

**KEYWORDS:** Servqual, Servqualing, Customer satisfaction.

### INTRODUCCION

Uno de los enfoques que ha emprendido el sector educativo para hacer frente a los inminentes cambios que le exige la sociedad, es la adopción de modelos de gestión de comprobado éxito en el sector empresarial. Modelos de sistemas de gestión como ISO 9000, y el premio Malcolm Baldrige, así como los requerimientos gubernamentales específicos del sector universitario, plantean la medición de la calidad del servicio como herramienta de soporte al control y a la toma de decisiones. Con la Evaluación de la calidad en una

organización. La calidad del servicio, en términos generales, es el resultado de comparar lo que el cliente espera de un servicio con lo que recibe.

En este trabajo de investigación se partirá de un instrumento de medición una versión modificada del SERVQUAL, se realizarán las modificaciones pertinentes que lleven a conocer la percepción de la calidad de los servicios por parte de los estudiantes. El SERVQUAL de referencia presenta 22 variables para evaluar las expectativas y 22 para las percepciones, agrupadas en cinco (05) dimensiones: Elementos Tangibles, Confiabilidad, Capacidad de Respuesta, Seguridad y Empatía. Se modificarán de acuerdo a las condiciones sociales, económicas y culturales mexicanas en particular de Baja California.

Primero se establecerán los métodos y materiales a utilizar, luego se presentaran los resultados que se pretenden lograr en la investigación, fundamentado en el análisis de fiabilidad, y determinar las dimensiones de la calidad del servicio educativo universitario. Se discutirá la determinación de la validez del instrumento de evaluación y la determinación de la Importancia relativa de los factores previamente establecidos. Finalmente, se presentará el Modelo SERVQUAL modificado y propuesto para el Plantel Mexicali del Colegio de Bachilleres de Baja California. En este modelo propuesto, se plantea una visión global del proceso de medición de la calidad del servicio e incluirá el mejoramiento continuo de dicho proceso. El cambio de paradigma hacia un reto a la calidad, la rendición de cuentas, la excelencia educativa, y los avances sucedidos últimamente a nivel mundial, liderados por la globalización y el Internet, han traído como consecuencia diversidad de oportunidades de estudio en los diferentes niveles educativos. Las características políticas, económicas y sociales actuales demandan mayores exigencias de aquellos especialistas que diseñan y planifican las actividades de formación educativa

Planteamiento del problema: ¿Qué relación existe entre la percepción de la calidad del servicio educativo y la importancia atribuida a las dimensiones que integran la calidad del mismo, de los estudiantes de bachillerato del plantel Mexicali del COBACH de B.C. durante el periodo escolar 2012-1? Según Mejías, Reyes y Maneiro (2006), Mejías (2006), Reyes y Reyes (2012), Reyes (2012) las dimensiones de la calidad del servicio se dividen en: Elementos Tangibles, Confiabilidad, Capacidad de Respuesta, Seguridad y Empatía y presentan 22 indicadores básicos traducidos y adaptados a la educación superior. Definición según Parasuraman (1988): Las percepciones de calidad de los clientes están influenciadas por una serie de diversas diferencias que ocurren en el lado de quien ofrece el servicio, y proponen la necesidad de examinar la naturaleza de la asociación entre la calidad del servicio percibida por el cliente y sus determinantes.

Justificación. Hoy en día el trabajo del administrador en las organizaciones está directamente relacionado con los conceptos de calidad. La teoría de Parasuraman, mide la calidad del servicio, con el instrumento Servqual, y el Servqualing propuesto por Mejías, adapta este instrumento al sector educativo, denominado Servoualing. El servoual de Parasuraman ha sido aplicado en empresas internacionales y nacionales, y el servqualing de Mejías, implementado en instituciones latinoamericanas de educación superior, mostrando bastante aceptabilidad en su utilización en la medición de la calidad del servicio educativo en Latinoamérica. Según Deming (1993 citado en Evans y Lindsay, 2000) la calidad debe dirigirse a las necesidades del consumidor, tanto presentes como futuras, y se determina por las interrelaciones entre los factores como el producto, usuario, y servicio. En el proceso administrativo de la empresa, en la etapa de control, se compara lo real con lo planeado. El control de calidad total tiene como propósito el cumplimiento de los requisitos propuestos por el consumidor, la prevención de la comisión de errores que reduzcan la calidad del producto, la intención de fabricar productos sin defectos y, reducir al mínimo el costo del incumplimiento relacionado con la calidad. Las empresas extranjeras y nacionales han alcanzado avances trascendentales en su ejercicio después de haber implantado un sistema de gestión de calidad total, ofreciendo productos y servicios de mejor calidad. En México, la calidad se ha difundido muy rápido de manera efectiva, al principio en la industria, y después en los sectores educativos, servicios y gobierno. Esta investigación es importante en la actualidad por que toca el concepto de la calidad del

servicio percibido por el cliente como una de las estrategias que utiliza actualmente la administración para mejorar la producción de servicios en las empresas gubernamentales, privadas, sin fin o con fin de lucro, con ello mantenerse y en lo posible liderar el mercado de servicios. Otro aspecto importante que se destaca en este estudio es el estudiar la percepción de la calidad del servicio , al ser un elemento más complicado para su medición que la calidad del producto, es doblemente abstracto, por un lado el servicio como tal es etéreo se produce sólo en el momento en que existe la interacción cliente – proveedor, y por otro se trabaja con las percepciones que entran en el terreno de la subjetividad del cliente, pero ha sido demostrado el hecho de ser confiable medir las percepciones con instrumentos como la escala de actitudes hacia el servicio llamada escala Likert o la escala de Diferencial Semántico. Se destaca un aspecto más, en el terreno de la Administración Educativa y en particular la educación media superior pública el tema resulta relevante y novedoso en los últimos años, como se expone en la revisión de la literatura, no es un acción cotidiana medir la percepción de la calidad del servicio educativo de sus clientes (estudiantes).

Con esta investigación se pretende hacer un aporte en lo teórico al adaptar la escala servqual y servqualing a la medición de la percepción de la calidad del servicio educativo de bachillerato desde la perspectiva del estudiante, y en particular la creación de conceptos (obtención de dimensiones latentes, subyacentes o empíricas) en el área de la Administración de los Servicios ad-hoc al contexto del servicio educativo prestado en el plantel Mexicali, del COBACH de B.C. Está investigación presenta como un aporte sustancial un instrumento de investigación "escala de Likert" generado a partir del servqual y el servqualing, en el cual se revelan nuevas dimensiones latentes en la percepción del servicio educativo del nivel medio superior de los estudiantes investigados, haciendo este instrumento un referente pertinente para la realidad institucional del COBACH. El instrumento presenta confiabilidad y validez para ser utilizado en contextos similares. Hasta ahora no se ha realizado la medición de la percepción de la calidad desde la perspectiva de los alumnos en el nivel educativo medio superior desde la perspectiva del servqual, por lo tanto resulta interesante analizar la percepción que tienen los estudiantes de bachillerato y su utilidad en el desarrollo y en la planeación estratégica institucional.

La escala de medición de calidad de servicio educativo del nivel medio superior, obtenida en esta investigación, puede ser útil como herramienta de apoyo en la administración de la calidad de los servicios educativos de nivel medio superior. La presente investigación puede resultar de utilidad a los programas de Posgrado en Administración y Educación así como fuente bibliográfica y modelo de la utilización de técnicas de medición de la percepción de la calidad del servicio en general y la aplicación de los métodos estadísticos multivariantes como el coeficiente de fiabilidad alfa de Cronbach y el Análisis Factorial (Reducción de factores) para el estudio de variables latentes o empíricas, las cuales son muy particulares a cada organización educativa, aunque se confirman cada una de las afirmaciones que miden la percepción de la calidad del servicio educativo, las dimensiones empíricas varían en cada caso particular, al estar vinculadas a la cultura organizacional, a la cultura de los sujetos y a la cultura propia de cada localidad geográfica. Objetivo general de investigación: Analizar la relación que existe entre la percepción de la calidad del servicio educativo y la importancia atribuida a las dimensiones que integran la calidad del mismo, de los estudiantes de bachillerato del COBACH de B.C. durante el periodo escolar 2012-1. Alcance del estudio: La presente investigación se delimita al estudio de caso del universo del plantel Mexicali del COBACH utilizando muestras a conveniencia del investigador por lo que los resultados obtenidos serán de carácter descriptivo correlacional cuya aplicación a otros contextos será mediante el uso de analogías y no con el rigor científico de paradigma epistemológico cuantitativo.Hipótesis general: La percepción de la calidad del servicio educativo está relacionada con la importancia atribuida a las dimensiones que integran la calidad del mismo de los estudiantes del COBACH durante el periodo escolar 2012-1.

### REVISIÓN DE LITERATURA

Se parte de los conceptos de las categorías usadas por Parasuraman et al. (1988,1991), y Mejías (2006): Dimensión Elementos tangibles: Apariencia de las instalaciones Físicas, Equipos, Personal y Materiales de Comunicación. Dimensión Empatía: Atención individualizada que Ofrece la Institución a los Estudiantes. Dimensión Seguridad: Conocimientos y atención Mostrados por el Personal de la Institución y sus Habilidades para inspirar Credibilidad y Confianza. Dimensión Confiabilidad: Habilidad para ejecutar el Servicio Prometido de Forma Fiable y Cuidadosa. Dimensión Capacidad de Respuesta: Disposición y Voluntad del Personal de la Institución para ayudar al Estudiante y Proporcionar el Servicio. Variables subyacentes: Los indicadores del instrumento que mide la percepción de la calidad del servicio, se organizan en dimensiones diferentes a las teóricas, de acuerdo a la cultura educativa universitaria propia, particular, diferente que la hace distintiva de otras organizaciones, pero también se presentan los casos en los que se confirman las dimensiones teóricas, su importancia radica en identificar con precisión la percepción para atender las necesidades de los alumnos y de la organización educativa.

### METODOLOGÍA

La presente investigación se delimita al estudio de caso del universo del plantel Mexicali del COBACH, se manejaron muestras a conveniencia del investigador por lo que los resultados obtenidos son de carácter descriptivo y descriptivo correlacional cuya aplicación a otros contextos será mediante el uso de analogías y no con el rigor científico de paradigma epistemológico cuantitativo. El estudio de caso, se inicia con el paradigma epistemológico cuantitativo, Hipotético Deductivo. Universo. La población total de estudiantes es de 1185 en el turno matutino y el vespertino. Muestra. Se obtuvieron 400 encuestas del total de la población, dado las condiciones del estudio se utilizó un muestreo de tipo no probabilístico por conveniencia del investigador. Descripción del instrumento de medición. Se utilizó un instrumento de medición cuantitativa "Tipo escala de Likert", versión modificada del SERVQUAL, el SERVQUALing que contempla cinco dimensiones: Elementos Tangibles, Confiabilidad, Capacidad de Respuesta y Seguridad y Empatía. Se obtuvo una confiabilidad del instrumento de 0.955 de coeficiente alfa de Cronbach.

### RESULTADOS

Se obtuvieron resultados confiables en la definición de la relación entre las percepciones de los estudiantes de bachillerato de la calidad del servicio educativo universitario recibido y la importancia atribuida a las dimensiones que integran la calidad del mismo, en el Plantel Mexicali, del Colegio de Bachilleres de Baja California, durante el periodo escolar 2012-1. Una vez obtenido el procesamiento de los resultados, por medio de las medidas estadísticas se detectaron los puntos de mejora para el Plantel, con el fin de contribuir al incremento en la calidad del servicio, y lograr un mejoramiento en el nivel de satisfacción de los estudiantes. Se obtuvieron las dimensiones latentes de la percepción de la calidad del servicio, utilizando la técnica de estadística multivariable de análisis factorial, reducción de factores, apoyados en el modelo de regresión múltiple, análisis de componentes principales y con la técnica de rotación VARIMAX. Se obtuvieron dos dimensiones latentes que son Empatía Eficiente y Apariencia y Eficacia. El Valor del determinante estadístico es de 0.000, excelente dato para realizar el análisis de factores. El estadístico KMO arrojó un valor de 0,954, lo que quiere decir que hay factores que relacionan a los datos y que puede utilizarse el análisis de factores. El valor arrojado para las prueba de Bartlett fue de 5712.882, con un nivel de significación de 0.000, por lo que fue una evidencia de que el modelo de factores era adecuado para explicar los datos.

Se presentan los estadísticos descriptivos de la *percepción de la calidad de servicio en general* y la media por cada una de las dimensiones. El punto de mejora prioritario se observa en la dimensión de Confiabilidad: La Habilidad para ejecutar el servicio prometido de forma fiable y cuidadosa, la media general de esta dimensión es 3.3, no está ni de acuerdo ni en desacuerdo. Ver tabla 1.

La media general de dimensión *elementos tangibles* por redondeo se encuentra en el nivel de acuerdo con la calidad en esta dimensión, el indicador prioritario de mejora es el de la afirmación 4: Los elementos materiales (folletos, reportes y similares) son visualmente atractivos, con una media de 3.3, no está ni de acuerdo ni en desacuerdo. Ver tabla 2. La media general de la dimensión confiabilidad por redondeo se encuentra en 3.3, ni de acuerdo ni en desacuerdo con la calidad en esta dimensión, los indicadores prioritarios de mejora son las afirmaciones 5, cuando el personal de la institución promete hacer algo en cierto tiempo, lo hace; 6, Cuando tiene un problema, en la institución muestran interés en solucionarlo; 7, El personal de la institución realiza bien el servicio desde la primera vez; y 9, El personal de la institución mantiene sus expedientes sin errores; se perciben en el nivel de ni acuerdo ni en desacuerdo. Ver tabla 3. La media general de la dimensión capacidad de respuesta por redondeo se encuentra en el nivel de acuerdo con la calidad en esta dimensión, los indicadores prioritarios de mejora son las afirmaciones 11, El personal de la institución le ofrece un servicio puntual y 13, El personal de la institución se encuentra disponible para atenderle, están en el nivel de ni acuerdo ni en desacuerdo. Ver tabla 4. La media general de la dimensión seguridad por redondeo se encuentra en el nivel de acuerdo con la calidad en esta dimensión, los indicadores prioritarios de mejora son las afirmaciones 14 El comportamiento del personal de la institución le inspira confianza y 16 El personal de la institución es amable con usted; al no estar ni de acuerdo ni en desacuerdo con ellas, Ver tabla 5.

La media general de la dimensión *empatía* por redondeo se encuentra en el nivel de acuerdo con la calidad en esta dimensión, los indicadores prioritarios de mejora son las afirmaciones 18, El personal de la institución comprende las necesidades de sus estudiantes. Ver tabla 6. Esta tabla presenta los coeficientes de correlación de la media general de la percepción de la calidad de servicio educativo en el nivel medio superior con cada una de las dimensiones teóricas (Elementos tangibles, confiabilidad, capacidad de respuesta, seguridad y empatía). Ver tabla 7. Esta tabla presenta las afirmaciones (indicadores) pertenecientes a cada dimensión latente: *Empatía eficiente y Apariencia y Eficacia.* El total de las 22 afirmaciones, en teoría se encuentran distribuidas en cinco dimensiones teóricas, en el caso de los alumnos bajo estudio, han agrupado los indicadores en sólo dos dimensiones según su percepción. Ver tabla 8.

La media general de la *percepción de la calidad del servicio educativo del nivel medio superior* es de 3.5, por redondeo aritmético sube a 4, significa que se está de acuerdo con la calidad del servicio educativo recibido. En la dimensión latente de Empatía Eficiente se tiene una medición de 3. 5, están de acuerdo con la atención individualizada y la eficiencia en el servicio, en la dimensión latente de Apariencia y Eficacia la medición es de 3.5, de acuerdo con los aspectos visuales de las instalaciones, material gráfico de comunicación y la apariencia alineada del personal. Ver tabla 9. Se muestra un alto coeficiente de correlación r de Pearson superior a 0.90 en cada una de las dimensiones latentes con la media general de la percepción de la calidad del servicio educativo en el nivel medio superior. Ver tabla 10.

	Ν	Mínimo	Máximo	Media	Desv. típ.
Elementos Tangibles	400	1.75	5.00	3.7981	.65156
Confiabilidad	400	1.40	5.00	3.3235	.77573
Capacidad de Respuesta	400	1.00	5.00	3.5612	.77678
Seguridad	400	1.25	5.00	3.5387	.79100
Empatía	400	1.20	5.00	3.5045	.82649
Media General	400	1.32	5.00	3.5452	.68126
N válido (según lista)	400				

Tabla 1: Estadísticos Descriptivos

Estadísticos descriptivos de la percepción de la calidad de servicio: general y media por cada una de las dimensiones. El punto de mejora prioritario se observa en la dimensión de Confiabilidad :Habilidad para ejecutar el servicio prometido de forma fiable y cuidadosa.

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### Tabla 2: Dimensión elementos tangibles

	Estadísti	cos descriptivos			
	Ν	Mínimo	Máximo	Media	Desv. típ.
ELTANG	400	1.75	5.00	3.7981	.65156
afl La institucion cuenta con equipos (cómputos, laboratorios) modernos	400	1	5	4.21	.751
a2 Las instalaciones fisicas de la institucion son visualmente atractivas	400	1	5	3.76	.823
a3 El personal de esta institucion tiene apariencia limpia y alineada	400	2	5	3.90	.787
a4 Los elementos materiales (folletos, reportes y similares) son visualmente atractivos	400	1	5	3.31	.899
N válido (según lista)	400				

La media general de dimensión elementos tangibles por redondeo se encuentra en el nivel de acuerdo con la calidad en esta dimensión, el indicador prioritario de mejora es el de la afirmación 4: Los elementos materiales (folletos, reportes y similares) son visualmente atractivos.

### Tabla 3: Dimensión confiabilidad

	Estadísti	cos descriptivos			
	Ν	Mínimo	Máximo	Media	Desv. típ.
CONFIABILIDAD	400	1.40	5.00	3.3235	.77573
af5 cuando el personal de la institucion promete hacer algo en cierto tiempo, lo hace	400	1	5	3.23	.922
a6 Cuando tiene un problema, en la institucion muestran interes en solucionarlo	400	1	5	3.20	.972
a7 El personal de la institucion realiza bien el servicio desde la primera vez	400	1	5	3.46	.919
a8 El personal de la institucion concluye el servicio en el tiempo prometido	400	1	5	3.51	.958
a9 El personal de la institucion mantiene sus expedientes sin errores	400	1	5	3.22	1.084
N válido (según lista)	400				

La media general de la dimensión confiabilidad por redondeo se encuentra en el nivel ni de acuerdo ni en desacuerdo con la calidad en esta dimensión, los indicadores prioritarios de mejora son las afirmaciones 5, 6,7 y 9.

#### Tabla 4: Dimensión capacidad de respuesta

	Estadísti	cos descriptivos			
	Ν	Mínimo	Máximo	Media	Desv. típ.
CAPRES	400	1.00	5.00	3.5612	.77678
a10 El personal de la institucion le comunica cuando concluira el servicio ofrecido	399	0	5	3.73	.958
all El personal de la institucion le ofrece un servicio puntual	400	1	5	3.47	.936
a12 El personal de la institucion esta dispuesto a ayudarle	400	1	5	3.59	.948
a13 El personal de la institucion se encuentra disponible para atenderle	400	1	5	3.46	.998
N válido (según lista)	399				

La media general de la dimensión capacidad de respuesta por redondeo se encuentra en el nivel de acuerdo con la calidad en esta dimensión, los indicadores prioritarios de mejora son las afirmaciones 11 y 13.

### Tabla 5: Dimensión seguridad

	Estadísti	cos descriptivos			
	Ν	Mínimo	Máximo	Media	Desv. típ.
SEGURIDAD	400	1.25	5.00	3.5387	.79100
a14 El comportamiento del personal de la institucion le inspira confianza	400	1	5	3.42	1.066
af15 usted se siente seguro en sus tramites realizados en la institucion	400	1	5	3.74	.920
a16 El personal de la institucion es amable con usted	400	1	5	3.32	1.096
a17 El personal tiene conocimientos suficientes para responder sus preguntas	400	2	5	3.68	.831
N válido (según lista)	400				

La media general de la dimensión seguridad por redondeo se encuentra en el nivel de acuerdo con la calidad en esta dimensión, los indicadores prioritarios de mejora son las afirmaciones 14 y 16.

### Tabla 6: Dimensión empatía

	Estadísti	cos descriptivos			
	Ν	Mínimo	Máximo	Media	Desv. típ.
EMPATÍA	400	1.20	5.00	3.5045	.82649
a18 El personal de la institucion le da una atencion individualizada	400	1	5	3.45	.962
a19 La institucion tiene horarios de trabajo adecuados para todos sus estudiantes	400	1	5	3.50	1.071
a20 La institucion cuenta con personal que le ofrece una atencion personalizada	400	1	5	3.56	.956
a21 El personal de la institucion se preocupa por los intereses de los estudiantes	400	1	5	3.56	.905
a22 El personal de la institucion comprende las necesidades de sus estudiantes	400	1	5	3.46	1.023
N válido (según lista)	400				

La media general de la dimensión empatía por redondeo se encuentra en el nivel de acuerdo con la calidad en esta dimensión, los indicadores prioritarios de mejora son las afirmaciones 18 y 22.

#### Tabla 7: Correlación entre dimensiones con la media general

Dimensión	r de Pearson	Significancia-2
Elementos tangibles	0.849	0.000
Confiabilidad	0.893	0.000
Capacidad de Respuesta	0.897	0.000
Seguridad	0.909	0.000
Empatía	0.901	0.000

Esta tabla presenta los coeficientes de correlación de la media general de la percepción de la calidad de servicio educativo en el nivel medio superior con cada una de las dimensiones teóricas.

#### Tabla 8. Dimensiones Latentes

Dimensión Latente	Indicadores (Afirmaciones)
Empatía Eficiente	1, 8, 9, 11, 15, 16, 17, 18, 19, 20, 21 y 22.
Apariencia y Eficacia	2, 3, 4, 5, 6, 7, 10, 12, 13 y 14.

Esta tabla presenta las afirmaciones (indicadores) pertenecientes a cada dimensión latente.

### Tabla 9: Estadísticas descriptivas generales de las dimensiones latentes

Estadísticos descriptivos						
	N	Mínimo	Máximo	Media	Desv. típ.	
MEDGRAL	400	1.32	5.00	3.5452	.68126	
EmpatíaEficiente	400	1.33	5.00	3.5558	.72146	
AparienciayEficacia	400	1.30	5.00	3.5063	.69673	
N válido (según lista)	400	1				

Esta tabla presenta las estadísticas descriptivas generales y por cada una de las dimensiones latentes.

#### Tabla 10: Correlación entre las dimensiones latentes y media general.

Dimensión	r de Pearson	Significancia-2 colas Porcentaje de p Valor	
Empatía eficiente	0.968	0.000	
Apariencia y eficacia	0.959	0.000	

Se muestra el coeficiente de correlación r de Pearson de cada una de las dimensiones latentes con la media general de la percepción de la calidad del servicio educativo en el nivel medio superior.

### **CONCLUSIONES Y RECOMENDACIONES**

Se confirmó la hipótesis general "La percepción de la calidad del servicio educativo está relacionada con la importancia atribuida a las dimensiones que integran la calidad del mismo de los estudiantes del COBACH durante el periodo escolar 2012-1".Se obtuvieron las dimensiones latentes: Empatía Eficiente tiene una medición de 3. 5, los alumnpos están de acuerdo con la atención individualizada y la eficiencia en el servicio y una segunda dimensión latente de Apariencia y Eficacia con una medición es de 3.5, de acuerdo con los aspectos visuales de las instalaciones, material gráfico de comunicación y la apariencia alineada del personal. Ambas con un alto coeficiente de correlación de Pearson de más de 0.90, p = 0.000. El instrumento utilizado resultó útil, válido y confiable para medir la percepción de la calidad del servicio educativo del nivel medio superior y puede utilizarse en instituciones con condiciones similares. Se sugiere aplicar el instrumento de investigación aquí utilizado en otras instituciones similares dentro del contexto nacional y reafirmar su validez y confiabilidad.

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# LAS INSTITUCIONES MICROFINANCIERAS EN LA INCLUSIÓN DE LAS REGIONES DE OAXACA

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### RESUMEN

El Estado de Oaxaca es conocido por sus atractivos turísticos, su mosaico cultural y geográfico, en contraste son evidentes la pobreza y la marginación. En Oaxaca se localizan 570 municipios de los 2445 que integran la república mexicana y se distribuyen en siete regiones. La inclusión financiera es considerado un indicador de desarrollo económico, sin embargo, de acuerdo al reporte de la (CNBV, Reporte de Inclusión Financiera, 2010), Oaxaca destaca por su bajo índice de inclusión financiera. Aunado a lo anterior y a pesar de la aprobación de las Leyes de Ahorro y Crédito Popular (2001) y que Regula las Cooperativas de Ahorro y Crédito (2009), no existía información y control de las IMF (cajas y organismos de ahorro y crédito popular), no se conocía la forma en que participaban en la inclusión financiera. Se aplicó una entrevista semi-estructurada a 325 administradores. Los datos obtenidos permitieron hacer una primera caracterización y mapeo de las Instituciones y un análisis de los servicios que ofrecen. Se probó que en seis regiones, las IMF contribuyen con sus servicios a los indicadores de inclusión financiera y desarrollo.

PALABRAS CLAVE: Microfinanzas, inclusión financiera, regiones económicas

# THE MICRO FINANCE SECTOR IN FINANCE INCLUSION IN OAXACA REGIONS

### ABSTRACT

Oaxaca state is known by it touristic attractive, its culture and geographic variety, as contrast its evident the pour ness and the lack ness. In Oaxaca there are located 570 districts of 2445 in all Mexico and they are distributed in seven regions. The finance inclusion is considerate as a fact of economic development, however, according as CNBV report (Report of finance inclusion, 2010), Oaxaca stand out by it very low fact of finance inclusion. Also and although of the approval of savings and popular credits laws (2001) that judge the savings and credit cooperatives (2009), there was no information and control of the IMF (boves, savings companies and popular credit), the was as they participate in the finance inclusion was' not know and there wasn't information about their services. We propose to locate the IMF and analyze the contribution of their services in the finance inclusion. It applied a half-estructurated interview to 325 managers. We obtained facts elbowed to do a first distinguish and mapping of the IMP and analysis of their services. It was proved in six regions. The IMF's contributes with their services to upgrade the facts of finance inclusion and development.

**JEL:** G20, G21, G28, G29, H30

KEYWORDS: Microfinance, finance inclusion, economic regions.

# INTRODUCCIÓN

Uno de los indicadores importantes para considerar que un país o región es económicamente desarrollado, es el grado de inclusión financiera de sus habitantes con respecto al acceso a instituciones, productos y servicios financieros, dicho indicador es el que determina a nivel regional y local el grado de atención a los usuarios de los servicios financieros. De acuerdo a un artículo publicado en la revista de Ejecutivos de Finanzas del IMEF (2009). La inclusión financiera puede ser definida como el nivel de inclusión o exclusión en la cual todas las personas con edad laboral tienen acceso y gozan de un conjunto de servicios financieros de calidad, que cubran los servicios de pagos, ahorros, créditos, fondos para el retiro y seguros, regulados a través de un sistema de protección al usuario y fomentados por medio de una educación financiera. En México todavía son muchas las personas que están alejadas del sistema financiero debido a una falta de cultura financiera, debido a la distancia que existe entre su residencia y los lugares que ofrecen dichos servicios y productos, o bien a los costos que requieren cubrir para acceder a estas alternativas, el estado de Oaxaca se destaca por contar con un grupo significativo de personas sin acceso a los servicios financieros de la banca formal. Lo destacable es la falta de interés que ha mostrado la banca formal para atender a este sector de la sociedad.

El estado de Oaxaca es considerado como un mercado poco atendido por servicios financieros, porque sólo el 6% de los 570 municipios que lo conforman cuentan con servicios bancarios, en comparación con la media nacional de 64% de los municipios con una sucursal bancaria es mínima la presencia de la banca tradicional. Sin embargo, de acuerdo a (Consultores, 2011), en el territorio oaxaqueño se localizan aproximadamente 300 instituciones microfinancieras, distribuidas en un territorio con más de 2.4 millones de habitantes adultos (INEGI, 2011). Desafortunadamente en los últimos años más de 25,000 ahorradores han sufrido los efectos de la falta de regulación y supervisión con el daño directo a sus recursos por desfalco o fraude.

A pesar de las condiciones en las que operan la mayoría de instituciones microfinancieras en el territorio oaxaqueño, todavía representan la única opción de acceso a servicios financieros para muchas familias. Por tales razones resultó importante analizar las condiciones de los servicios microfinancieros y su participación en la inclusión financiera en el Estado de Oaxaca. Por lo que se planteo la interrogante a resolver. ¿Cuál es la importancia de las instituciones microfinancieras en la inclusión financiera en las regiones del Estado de Oaxaca? El **objetivo** general de esta investigación fue analizar la contribución de los servicios que prestan las IMF en los indicadores de inclusión financiera en las ocho regiones del Estado de Oaxaca.

# **REVISIÓN DE LITERATURA**

Para la Comisión Nacional Bancaria y de Valores (CNBV), inclusión financiera significa tener acceso a un conjunto de productos y servicios financieros, los cuales incluyen crédito, ahorro, seguros, sistemas de pago y pensiones, así como educación financiera y protección al consumidor. De acuerdo a dicha definición lo ideal sería el acceso de la mayoría de personas, sin embargo, existe un sector caracterizado por escasos recursos, habitar en localidades marginadas y a cuyos habitantes no llegan los servicios financieros. Por lo que una alta inclusión financiera significa que todos los actores que en ella participan ganan. Lo anterior resume la importancia de la inclusión financiera en las actividades económicas de la región, pero también en su desarrollo. El nivel de rezago en México a la accesibilidad a servicios financieros es importante si se compara con la de países desarrollados. Mientras que en México se cuenta con 7.6 sucursales financieras por cada cien mil habitantes en España cuentan con 95.9 sucursales. La consecuencia directa de la inclusión financiera se observa en los niveles de ahorro y en el crédito, pues mientras en México el 37% de los hogares registran algún tipo de ahorro y el 26% manejan un crédito, en España el 92% de los hogares ahorran y el 77% cuentan con créditos.

De acuerdo a (Hernández-Romero, 2006), en términos generales se concibe a las microfinanzas como, un tipo de financiamiento a pequeña escala, pero con la característica de que es para familias pobres, por lo que aludiendo al termino de finanzas son las que tienen que ver, no solo con el acceso u obtención del crédito, sino con el uso y manejo del financiamiento tanto de los que proveen como de los que reciben. El concepto convencional de microfinanzas es que se trata de un instrumento diseñado para otorgar, a las familias más pobres, pequeños préstamos (microcrédito), para apoyarlos económicamente para realizar actividades productivas (negocios-autoempleo).

Esta definición considera solamente la visión de los actores (instituciones), a quienes se dedican exclusivamente a brindar microcréditos y no a los que reciben el servicio. En otras definiciones revisadas se consideran otros servicios (Otero M. y., 1998), como el ahorro que menciona Guilli citado por (Cuesta-Sanz, 1999); seguros y transferencias de remesas en algunos casos (Gentil, 1997). En su concepción más amplia las microfinanzas deben considerar un enfoque holístico como lo plantean (Weinmann, 1999) y (Valdez, 2004), ellos mencionan que las microfinanzas en la actualidad representan diversos servicios ligados a las telecomunicaciones, la educación e incluso la salud, y se presentan como un mecanismos de desarrollo económico regional con la meta de combatir la pobreza y de inducir al desarrollo microempresarial.

Y como sostiene (Otero P., 2004), las microfinanzas no son finanzas pequeñas, sino otro tipo de proyecto, son finanzas que no pueden ser sometidas a las reglas estandarizadas del sistema bancario. Sin embargo, en la mayoría de las definiciones no se considera la percepción de los actores, es decir los usuarios del financiamiento. Se han desarrollado metodologías como las de las microfinanzas solidarias, para tratar de incluir a los usuarios, pero hay pocos casos que promuevan verdaderos procesos solidarios y de desarrollo del potencial humano a través de microfinanciamiento.

De acuerdo a (Pro-Crédito, 2009), las instituciones microfinancieras no constituyen una figura jurídica en sí misma, si no la que agrupan distintas figuras que tienen en común el uso de metodologías diseñadas para ofrecer servicios financieros a la microempresa y menciona que las figuras jurídicas más comunes son: SOFOM (Sociedades Financieras de Objeto Múltiple ), S.A. DE C.V.; A.C. (Asociación Civil); I.A.P. (Instituciones de Ahorro y Préstamo) y SOFIPO (Sociedades Financieras Popular). De acuerdo a (Esquivel Martínez, 2009), hasta el 2009 a nivel nacional en el sector microfinanciero se observó un crecimiento exponencial de la figura jurídica de la SOFOM (Sociedades Financieras de Objeto Múltiple ), figura jurídica con la cual se apoyó la creación de nuevas empresas y se impulsó la transformación de organizaciones de la sociedad civil. Debido al apoyo hacia el tipo de organización SOFOM algunas de las Asociaciones Civiles e Instituciones de Asistencia Privada se transformaron en SOFOMES.

A pesar de que (Pro-Crédito, 2009) solo considera las figuras de SOFOM, A.C., I.A.P. Y SOFIPO, en la realidad se encuentran operando otros modelos de instituciones microfinancieras, entre ellas la figura de Sociedad Cooperativa de Ahorro y Préstamo (SOCAP), la cual es la más frecuente en el caso del estado de Oaxaca, lo que denota la falta de información actualizada del sector y las condiciones en las que operan, también la falta de supervisión de sus actividades.

En otros países latinoamericanos como Argentina (Bukstein, 2004), se han realizado estudios para analizar la participación de las entidades microfinancieras como factor de inclusión para la población atendida por las mismas. En los resultados de la autora se observa un análisis de los servicios que ofrecen y la importancia que representa para los usuarios. Sin embargo, ese estudio difiere en las condiciones de la población que analizó, solo habitantes de Buenos Aires e incluyo un cuestionario de opinión de los usuarios. En Nicaragua (Bastiaensen & Marchenti, 2010), al analizar la cadena de valor en empresas rurales en el país centroamericano, encontraron que los servicios que

prestan contribuyen en la creación e impulso de microempresas, sin embargo, no compararon la contribución de las mismas como parámetro de inclusión financiera.

(Serrano, 2009), analiza al sector microfinanciero colombiano desde la perspectiva del desarrollo, en su estudio compara la participación de las instituciones microfinancieras en relación a la banca tradicional que en Colombia se encuentra incursionando en servicios microfinancieros. En su estudio encuentra que son los microcréditos los que permiten que dichas instituciones participen en la inclusión financiera, principalmente de microempresarios.

En México (Cornejo & Galicia, 2011), presentaron como resultado de su investigación el análisis de los servicios que reciben los microempresarios de las microfinancieras y la impresión que tienen de los mismos y concluyeron que para los entrevistados representó la única forma de acceder al crédito, principalmente por el tipo de metodología empleada por la institución en la que se les facilita con la figura de microcrédito. Como se puede observar en los estudios revisados y que anteceden a esta investigación, no existe una línea de investigación que aborde desde la perspectiva de la inclusión financiera, el estudio de las instituciones microfinancieras y su contribución. Debido a la falta de información y de investigación formal en el tema y porque para un Estado como Oaxaca que en su territorio cuenta con más de 2.4 millones de habitantes adultos (INEGI, 2011). Con una población pobre (Cuesta-Sanz, 1999). Y en comparación con la media nacional de 64% sólo el 6% de los 570 municipios cuentan con una sucursal bancaria, resulta la importancia de conocer la participación que los servicios que prestan las instituciones microfinancieras en la inclusión financiera de sus habitantes.

### METODOLOGÍA

Para esta investigación se tomaron en cuenta las condiciones del estado de Oaxaca. En las que se localizaron las instituciones microfinancieras que se incluyeron en este análisis. Con una población pobre (INEGI, Estadísticas Básicas de Economía en el Estado de Oaxaca, 2011), con índices de inclusión financiera por debajo del índice nacional (Pro-Crédito, 2009), en un universo de IMFs con diversas figuras jurídicas y distribuidas en el entramado del multicultural y complejo territorio oaxaqueño. Originalmente se contemplo la realización de un censo para que con los resultados se integrara un sistema de instituciones microfinancieras del Estado de Oaxaca. El censo incluía a un universo de aproximadamente trescientas instituciones microfinacieras, las cuales eran la referencia de (Consultores, 2011), esta primer etapa se encuentra en proceso de georeferenciación.

### Muestra

Durante el recorrido para recolectar la información, se encontró que el sector muestra una dinámica de transformación. Los datos considerados por (Consultores, 2011), no coincidían con la realidad del sector. Situación que obligo a modificar la estrategia de localización original y se reestructuraron las rutas y recorridos para aplicar las entrevistas. El número final de instituciones incluidas en la encuesta fue de 325. La entrevista se realizó a gerentes o administradores de la institución microfinanciera. Los participantes fueron 325. Se incluyeron aspectos de localización, figura jurídica, características de organización, número de usuarios atendidos, cobertura de servicio (inclusión financiera en la región) y servicios prestados. La aplicación de la encuesta se realizó en las regiones de Valles Centrales, Istmo, Costa, Cañada, Tuxtepec, Mixteca y Sierra.

Región	Microfinancieras	Porcentaje
Cañada	24	7,38%
Costa	43	13,23%
Istmo	28	8,62%
Mixteca	67	20,62%
Papaloapam	31	9,64%
Sierra	12	3,69%
Valles Centrales	120	36,92%
Total	325	100%

Tabla 1: Entrevistas por región a instituciones microfinancieras

En esta tabla se muestra el resumen de los datos de las instituciones localizadas durante la encuesta realizada en el estado de Oaxaca. Fuente. Elaboración propia.

### RESULTADOS

Los resultados mostraron que las instituciones microfinancieras incluidas en la encuesta, prestan diferentes paquetes de servicios microfinancieros a la población. Entre los servicios que prestan también incluyen servicios no financieros. Sin embargo, lo más sobresaliente es que los servicios que prestan en su mayoría no se encuentran autorizados por la (CNBV, Ley de ahorro y crédito popular, 2009), pero *si contribuyen en la inclusión financiera* de los habitantes de la región porque permite el acceso al por lo menos un servicio financiero para los adultos que las habitan.

Como se puede observar en la Tabla 2 la figura de SOCAP representa un 77.85% de la población distribuida en las siete regiones del Estado. También se encontró las figuras de SOFOM, SOFIPO, SOFINCO Y SOFOL, la cuales en conjunto con las SOCAP representan el 92% de IMFs. Se localizaron otras figuras como los denominados microbancos, uniones de crédito, asociaciones civiles, sociedades financieras y hasta casas de empeño ofreciendo servicios de préstamo y/o ahorro Las SOCAP prestan un menú de servicios (préstamo, ahorro, remesas y microseguros) y son las instituciones microfinancieras con más cobertura de sus servicios a poblaciones alejadas y a pobladores con escasos recursos, principalmente mujeres y personas de la tercera edad. A pesar de que la SOCAP es la figura más representativa y que se caracteriza por ser la más viable para la regulación, los resultados indican que la mayoría de las instituciones microfinancieras localizadas en las regiones del estado de Oaxaca, ofrecen una variedad de servicios financieros que permiten considerar su participación en la inclusión financiera, pero algunos de los servicios que prestan no son los permitidos de acuerdo a su figura jurídica.

La falta de regulación y de supervisión de las operaciones de las instituciones microfinacieras pone entre dicho la relevancia de su participación como una alternativa de inclusión financiera porque actúan fuera de la ley y ponen en riesgo el patrimonio de los usuarios de sus servicios, por lo que habría que considerar que tan importante es que proporcionen un servicio en relación con el riego que ocasionan para el usuario del mismo. En términos de inclusión financiera y con respecto a la forma de operar de las IMFs en las regiones oaxaqueñas, un primer aspecto es el que representan los adultos que como socios participan en las mismas y que por consiguiente son usuarios de por lo menos un servicio microfinanciero.

De acuerdo a la Comisión Nacional Bancaria y de Valores, la inclusión financiera puede considerar el acceso de los adultos a por lo menos un servicio microfinanciero. Entre los indicadores establecidos por la misma CNBV se encuentra la presencia de un cajero para cada 10,000 habitantes o el acceso de a por lo menos un servicio de un porcentaje importante de la población. Los resultados mostraron que los servicios que prestan las instituciones microfinancieras involucran a un porcentaje importante de la población adulta, principalmente mujeres y a pesar de que muchos de los servicios prestados, no se encuentran regulados, son la única alternativa de observar inclusión

financiera. Un criterio que no especifica la CNBV es la participación de la población como socios y en este tipo de instituciones es el primer acercamiento a servicio. Como se observa en la tabla 3 las IMFs tienen como principales sujetos de inclusión financiera a sus socios, pero además proporcionan servicios de préstamo y ahorro a quince mil clientes en promedio por sucursal. También se observó que la cobertura de sus servicios es por lo menos en el área en la que se localiza la sucursal, pero también en la inmediata, la cual cubren a través de promotores, los cuales proporcionan al menos el servicio de crédito a los habitantes, por lo que se propone esta información como indicador de inclusión financiera regional.

Valles centrales	SOCAP	15537	19027	12.70%	15.55%
	SOFIPO	2000		1.63%	
	SOFOM	1490		1.22%	
Mixteca	SOCAP	20014	22779	16.35%	18.61%
MIXteca	SOFOM	2765	22119	2.26%	18.0170
	SOCAP	52044		42.53%	
Istmo	SOFOM	5900	62894	4.82%	51.39%
Istilio	Unión de crédito	150	02894	0.12%	31.3970
	Banco	4800		3.92%	
Danalaanam	SOCAP	80	3580	0.07%	2.93%
Papaloapam	SOFOM	3500	5580	2.86%	2.95%
Cañada	SOCAP	5376	7876	4.39%	6.44%
Canada	SOFOM	2500	/8/0	2.04%	0.4470
Sierra Sur	SOFIPO	2800	6220	2.29%	5.08%
Siella Sul	SOCAP	3420	0220	2.79%	3.08%
	Total	12237	6	100.00%	6

Tabla 3: Número de Socios de las Instituciones Microfinancieras

En esta Tabla se puede observar el comportamiento en el número de socios que participan en las instituciones microfinancieras y su importancia como sujetos a inclusión financiera. Fuente: Elaboración propia con base a los resultados observados

### CONCLUSIONES

Los resultados obtenidos en esta investigación permiten responder a la pregunta de investigación. Las instituciones microfinancieras localizadas en las siete regiones del estado de Oaxaca, si participan con los servicios que prestan en la inclusión financiera de los habitantes que no cuentan con servicios bancarios. La inclusión financiera se manifiesta en términos de los servicios que las IMFs ponen al alcance de la población marginada por el sistema bancario tradicional y que permiten el acceso a por lo menos un servicio financiero a la población adulta.

Este resultado inicial propone considerar el indicador de acceso a servicios microfinancieros de la IMFS como indicador de inclusión financiera y así valorar con objetividad la participación de este tipo de instituciones en el desarrollo regional. La entrevista permitió obtener resultados cualitativos, los cuales permiten concluir que el sector microfinanciero en el estado de Oaxaca se escapa a una definición general. Se encuentra en una situación de vulnerabilidad por la falta de regulación, solo tres de las 325 instituciones se encuentran reguladas, y por la falta de supervisión, en su caso, por las autoridades municipales. La falta de regulación y supervisión no permite valor la participación de los servicios que prestan en la inclusión financiera.

La cobertura de los servicios prestados, incluidos los no regulados, representa el 100% para poblaciones marginadas, en términos de que los habitantes adultos por lo menos tengan acceso a un servicio, sin embargo, en muchas de las poblaciones la población adulta son mujeres. Lo que arroja resultados importantes para los índices de inclusión financiera en la que los informes oficiales sitúan al estado.Los servicios prestados por las instituciones microfinacieras se dirigen principalmente a proporcionar créditos, pero muchos de las instituciones incluidas en esta investigación no manifestaron contar con una metodología concreta, los entrevistados manifestaron que cada usuario requiere un trato particular, es decir debido a la población, no se pueden agrupar paquetes de servicios, lo que permite visualizar otros temas de investigación para analizar y diseñar

una metodología y estudiar el impacto de los servicios microfinancieros en la sustentabilidad de las comunidades.

### Limitaciones

Las limitaciones importantes son los resultados preliminares que se presentan, falta definir los indicadores de inclusión financiera para este sector, generar índices de inclusión financiera para las regiones, pendientes para el siguiente avance de esta investigación.

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# LAS REDES DE CONOCIMIENTO: CASO MICROEMPRESA DEDICADA AL CULTIVO DE LANGOSTA LOCALIZADA EN PUEBLA, MÈXICO

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### RESUMEN

El objetivo de este trabajo es indagar el papel que han desempeñado las redes sociales respecto a la transferencia de conocimientos en una micro empresa familiar dedicada al cultivo de langosta australiana. Para ello, se parte de que las redes sociales son un factor indispensable de la actividad empresarial, y que es a través de éstas como se puede tener acceso a diferentes recursos, entre otros a diferentes conocimientos: tecnológicos, administrativos y empresariales, que de otra forma no sería posible Basaldúa (2005). Asimismo, para llevar a cabo el estudio, se retoma el concepto de redes de conocimiento propuesto por Casas (2003), quien señala, que estas redes se construyen mediante intercambios entre un conjunto de actores que tienen intereses comunes en el desarrollo o aplicación del conocimiento científico, tecnológico o técnico para un propósito específico, sea este científico, de desarrollo tecnológico y de mejoramiento de procesos productivos. Dentro de los resultados obtenidos, se encontró que las relaciones informales, específicamente las establecidas con Instituciones de Gobierno, Instituciones de Educación superior (IES), amigos, empresarios, proveedores son las que más contribuyen a la adquisición y mejoramiento de conocimientos tecnológicos, administrativos y empresariales. Siendo el aspecto clave en la construcción de las redes la confianza, la reciprocidad y la regularidad. La metodológica utilizada está fundada en el estudio de caso en una empresa dedicada al cultiva de langosta australiana.

PALABRAS CLAVE: redes de conocimiento, cultivo de langosta.

# KNOWLEDGE NETWORKS: MICRO CASE LOBSTER CULTIVATION LOCATED IN PUEBLA, MEXICO

### ABSTRACT

The objective of this work is to investigate the role played by social networks regarding knowledge transfer in a micro family business dedicated to growing Australian lobster. For this, it is assumed that social networks are an indispensable part of doing business, and it is through them as you can have access to different resources, including different knowledge: technological, administrative and business that otherwise would not be possible Basaldúa (2005). Also to carry out the study, takes the concept of knowledge networks proposed by Casas (2003), who notes that these networks are built through exchanges among a set of actors who have common interests in the development or application of knowledge scientific, technological or technical for a specific purpose, be it scientific, technological development and improvement of production processes. Among the results, we found that informal relationships, specifically those established government institutions, higher education institutions (HEIs), friends, employers, providers are the main contributors to the acquisition and improvement of technological, administrative and business. Being the key aspect in building networks of trust, reciprocity and regularity. The methodology used is based on the case study in a company dedicated to Australian lobster grows.

KEYWORDS: knowledge networks, lobster culture.

### INTRODUCCIÓN

El objetivo de este trabajo es indagar el papel que han desempeñado las redes sociales respecto a la transferencia de conocimientos en una micro empresa familiar dedicada al cultivo de langosta australiana. Para ello, se parte de que las redes sociales son un factor indispensable de la actividad empresarial, y que es a través de éstas como se puede tener acceso a diferentes recursos, entre otros a diferentes conocimientos: tecnológicos, administrativos y empresariales, que de otra forma no sería posible Basaldúa (2005). Asimismo, para llevar a cabo el estudio, se retoma el concepto de redes de conocimiento propuesto por Casas (2003), quien señala, que estas redes se construyen mediante intercambios entre un conjunto de actores que tienen intereses comunes en el desarrollo o aplicación del conocimiento científico, tecnológico o técnico para un propósito específico, sea este científico, de desarrollo tecnológico y de mejoramiento de procesos productivos. El trabajo se estructura de la siguiente forma; Marco de referencia, el cual contiene el concepto de redes las redes sociales en México y los modelos de redes entre otros puntos. La metodología enfocada estudio de caso. Posteriormente se presentan generalidades del cultivo de langosta y algunos aspectos del mercado, continuando con el estudio caso en donde se describen, diferentes aspectos de la empresa como sus orígenes, estructura de operación producción, mercado y resultado del análisis del cado de estudio finalizando con las conclusiones y bibliografía.

### **REVISIÓN DE LA LITERATURA**

El marco de literatura se integra por las aportaciones de diferentes autores que abordan el tema de redes de conocimiento y que consideran para esta investigación.

### Definiciones De Las Redes De Conocimiento

Lara (2006; citado por Anunziata y Macchiarola 2010) explica las redes de conocimiento como individuos, grupos o instituciones, asociados con un fin en común: "...las redes de conocimiento son asociaciones entre individuos, grupos o instituciones que tienen una agenda común en torno a intereses diversos tales como: dar solución a problemas, compartir recursos e infraestructura, propiciar la cooperación, la solidaridad social, como así también el intercambio de información y conocimientos y la transferencia de tecnología". Casas (2001; citado por Prada, 2005) menciona que, estas redes implican desde redes profesionales, hasta redes de entretenimiento, pero también abarcan la transmisión de conocimientos o innovaciones que dan lugar a la formación de espacios regionales de conocimiento. De acuerdo a Moreno (2004), el objetivo de las redes de conocimiento es dar una respuesta adecuada a los nuevos desafíos que presenta la sociedad del conocimiento. Para fines de esta investigación se define a las redes de conocimiento como el conjunto de individuos, empresas, asociaciones y agentes de conexión que colaboran para la generación del conocimiento mediante el intercambio de información y la transferencia de tecnología con fines de innovación.

### Elementos Que Integran Las Redes Del Conocimiento

Las redes de conocimiento, están integradas por el elemento humano, así como por factores tecnológicos y sociales. Prada (2005) hace énfasis en cuatro elementos necesarios para la creación de Redes de Conocimiento, entre los cuales menciona: 1) Comunidades y equipos expertos: los equipos tienen tareas, las comunidades se mueven por los intereses de los participantes y el experto cualifica y filtra la información: 2) Comunidades de conocimiento: comunidades de cooperación. El trabajo colaborativo

produce mejores resultados que el trabajo individual: 3) El conocimiento, como la relación entre el sujeto y el objeto: 4) Conocimiento e innovación: plataforma base en la productividad.

### Formación De Redes De Conocimiento

Casas (2001) menciona que en un principio las fuentes que contribuyen al desarrollo de innovación, tenían su centro de atención en las empresas, porque se pensaba que los factores de las mismas, contribuían de manera directa en los procesos de aprendizaje en los sectores industriales. "Sin embargo a nivel internacional se conoce más que los conocimientos producidos en el ámbito de las universidades y los centros de investigación públicos constituyen un importante insumo para los procesos de innovación en las empresas...Así mismo hemos observado la transferencia de flujos de conocimiento, entre distintos actores e instituciones, que están dando lugar a la construcción de redes incipientes a las que hemos denominado redes de conocimiento". Las redes se construyen con las relaciones que se van creando entre los diferentes actores involucrados en una relación (Granovetter, 1973). Continuando con Granovetter (op cit), la idea básica es que los individuos son actores intencionales, con motivaciones sociales y económicas, cuyas acciones están influenciadas por una red de relaciones en las cuales están insertos. Así los actores y las relaciones que mantienen entre ellos, forman una red social, siendo un aspecto clave la posición que cada actor ocupa en ella, lo que forma la estructura social de la red, la cual a su vez, implica oportunidades y restricciones para los actores. Además, de los aspectos considerados sobre las redes de conocimiento, Casas (2003), señala que en el análisis de redes es necesario tomar en cuenta las siguientes dimensiones: 1) el contexto institucional de la colaboración entre los sectores público y privado; 2) la estructura o morfología de las redes; 3) la génesis, desarrollo y dinámica de las redes; 4) el contenido y/o los insumos que se intercambian y, 5) los resultados de las redes y del intercambio de conocimientos. Estas dimensiones incluven un conjunto amplio de características, que se sintetizan en el Cuadro 1.

### Modelos Para El Desarrollo De Las Redes De Conocimiento

En la era del conocimiento y la información, la mayoría de los trabajos se realiza de manera colaborativa, mediante el trabajo en grupo, con la finalidad de obtener el mejor resultado posible con la aportación de diversos puntos de vista, por lo cual se hace necesaria la existencia de modelos que permitan desarrollar redes de conocimiento de acuerdo a las necesidades del grupo de trabajo.

Lara (2007) muestra cinco modelos de redes de conocimiento, los cuales brindan alternativas de interacción diferentes para la creación de conocimiento: 1. Modelo del ágora. Establece el espacio en el cual investigadores y destinatarios de proyecto establecen mecanismos de interacción y desarrollo, el espacio puede ser físico o virtual (recordemos que las TIC's permiten romper las barreras del tiempo y del espacio). Este tipo de modelo presenta una auto-organización y una autorregulación, lo cual disminuye la jerarquía organizacional. 2. Modelo de Agregación. Éste modelo está centrado en la satisfacción del cliente, para lo cual se hace uso de un agente de enlace entre el grupo de investigación y el usuario de la información, lo cual agrega un valor de la demanda y permite un control jerarquizado. 3.

Contexto institucional	Estructura o morfología de las redes (Integrantes)	Dinámica: direccionalidad, duración, frecuencia comunicación y alcance	Contenido: formas de intercambio e insumos que circulan	Resultados de las redes y del intercambio de conocimiento
Presencia de Instituciones de Educación Superior (IES), centros públicos de investigación, asociaciones empresariales, instituciones mixtas público-privadas.	Noción de red: los nodos representan a los actores y las áreas que conectan los nodos representan las relaciones entre los actores. Las redes involucran flujos de información entre varios de los nodos de la red. Las redes son el elemento crítico de la formación de mercados, mediante su contribución al aprendizaje. El desarrollo de la red es un proceso evolutivo detonado por la innovación, en el que el aprendizaje es el aspecto central de la red.	Direccionalidad, durabilidad, intensidad y frecuencia. Dinámica formal o informal. Dinámica horizontal y vertical. Los procesos de comunicación. El alcance espacial o territorial.	Sobre la idea de conocimiento: tácito y codificado; intercambio de conocimiento. Flujos e insumos de conocimiento: endógeno y exógeno. Tipos de conocimiento: científico, tecnológico, empresarial. Fuentes: acceso a fuerza de trabajo altamente capacitada, universidades locales e internacionales, competidores, alianzas, incentivos gubernamentales, prensa y artículos sobre comercio, eventos locales e internacionales. Canales para cruzar fronteras: contratación de nuevo personal, publicaciones, reuniones, modos informales de comunicación, movilidad de personas entre organizaciones. Extensión de fronteras: relaciones personales informales.	Innovaciones radicales o incrementales. Generación de capacidades en las empresas. Generación de conocimiento. Resultados sociales, económicos y/o políticos. Creación de redes de conocimiento.

Cuadro 1: Dimensiones para el análisis de las redes sociales

Fuente: elaboración propia con datos de Casas (2003). El cuadro muestra características que permiten identificar la existencia de las redes sociales o de conocimiento

Modelo de Cadenas de valor. Éste modelo requiere de un agente integrador, el cual se encuentre en contacto con un grupo de investigadores innovadores, el cual se encarga del diseño, producción y distribución de productos o servicios. Creando soluciones de acuerdo a las problemáticas planteadas por los solicitantes. En cada etapa del proceso se añade valor, puesto que cada proyecto es ajustado a las necesidades del cliente. En este modelo se tiende un control jerárquico elevado. 4. Modelo de Alianza. Se da entre comunidades con la finalidad de obtener un bien común, por lo tanto se sustentan principalmente de las relaciones entre los colaboradores (individuos, comunidades u organizaciones). Con este modelo se busca con alto nivel de integración con el mínimo nivel jerárquico. 5. Modelo de Red distributiva. Este modelo integra a las demás redes, propone la distribución del conocimiento entre las mismas. Ésta se transfiere mediante el uso de un sistema de gestión de conocimiento en las redes de alta velocidad.

### Dinámicas De Redes De Conocimiento

Un aspecto más sobre el que es necesario abundar, es naturaleza formal o informal de las relaciones que conforman la red. Las redes formales, según Birley (citado en Levanti, 2001: 1046), se componen de los bancos, las agencias locales o nacionales, así como las cámaras y otras representaciones oficiales. Las redes informales se refieren a todas las relaciones personales del empresario, principalmente la familia, los amigos y los contactos de negocios. Para Tapia y Tapia (2010), existen dos tipos de relaciones en las redes: a) Las redes formales.-Se componen de las instituciones bancarias, las agencias locales o nacionales, las incubadoras y otras representaciones oficiales. b) Las redes informales.- Se refiere a todas las relaciones personales del empresario, principalmente la familia, los amigos y los contactos de negocios, esta red informal de acuerdo a autores como Vera (2007), juega un papel fundamental en los procesos de creación de una empresa y son la primera fuente de ayuda del emprendedor.

Además, las redes informales están sustentadas en un clima de confianza y de cordialidad; estas redes tienen tres características: a) Primera - confianza construida en el pasado de sus miembros: b) Segunda - confianza generada a partir del acompañamiento y sostenimiento en el proceso de desarrollo de sus

miembros: c) Tercera - confianza a partir de la identificación entre sus integrantes quienes comparten intereses y valores comunes.Lomnitz (1975), señala que la confianza es la base de la reciprocidad, y la reciprocidad es posible cuando hay igualdad de carencias; en el caso de los empresarios, estas carencias pueden ser de conocimientos, de tipo económico, de materiales, de maquinaria, etcétera.

En las redes se puede observar la existencia de relaciones; a) verticales; b) horizontales. Lo anterior permite comprender el papel de los actores así como la distribución de poder dentro de la red. Por lo tanto es posible afirmar que dependiendo del tipo de red las relaciones verticales o las horizontales adquirirán mayor importancia y por lo tanto las formas de distribución del poder serán diferentes (Casas, 2003).

### Las Redes De Conocimiento en Las MIPyME

En la actualidad las Micro, pequeñas y medianas empresas (MIPYME), tienen una sólida opción tanto para la creación de empleos y producción de artículos diversos, para responder a los requerimientos de la globalización. Dentro del desarrollo día a día de las MIPYME se puede identificar la importancia que para ellas tienen las redes de conocimiento, es decir, aquellos vínculos tanto formales como informales que se van construyendo entre la empresa y un conjunto de agentes como proveedores, clientes, instituciones de gobierno, por mencionar algunas. Estas redes sirven de acceso a diferentes recursos y conocimientos (Tapia y Tapia, 2010). Un primer intento para proponer un marco de referencia que tome en cuenta la importancia que tiene las redes sociales en el proceso de consolidación de las MIPYME ha sido el de Vera (2007; citado por Tapia y Tapia, 2010). En el marco de referencia mencionado, que es una adaptación de lo que ya con anterioridad habían propuesto Sharma, Chrisman y Chua, en la dimensión denominada: Administración en General y Cambio y Evolución Organizacional, se hace mención de la importancia que la construcción de las redes sociales tiene para el crecimiento y la consolidación, así como en el desarrollo del modelo de una MIPYME.

Uno de los aspectos que llama poderosamente la atención en el desempeño de las MIPYMES (Micro, Pequeñas y Medianas empresas) en general –también en el caso de las grandes empresas - son las redes sociales, es decir, aquellos lazos tanto formales como informales que se van generando entre la empresa – vía la figura del dueño, empresario y/o directivo - y los proveedores, clientes gobierno, etcétera. Estas redes tal y como lo señala Basaldúa (2005) son el vehículo para que la empresa pueda tener acceso a diferentes recursos, entre otros a distintos conocimientos que de otra forma no sería posible o muy difícil.

# METODOLOGÍA

El trabajo se desarrolló a través de una investigación cualitativa, bajo el método del estudio de casos. El diseño incluyó trabajo de campo, que se realizó a través de una guía de entrevista, llevando a cabo entrevistas a profundidad con la directora de la empresa de langostinos, así como a través de la observación directa en la empresa. Se opto por estudio de caso debido a qué existen cifras oficiales únicamente de dos estados de la republica mexicana en los que se desarrolla el cultivo de langosta, Puebla no aparece y las empresas localizadas en Tamaulipas y Morelos son de dimensiones diferentes a la empresa poblana que es micro empresa en Tamaulipas es una empresa mediana y en Morelos empresas pequeñas. De acuerdo con el proyecto que se desarrolla su enfoque es a microempresas y deben estar localizadas en Puebla, México. En estas condiciones es igualmente complejo construir un marco muestral que liste a las unidades de la población objetivo y que permita la asignación de probabilidades de selección a cada una de dichas unidades. Por supuesto se carece de una lista de empresas dedicadas al cultivo de langosta en términos de que dicha lista permita seleccionar e identificar a cada unidad de la población objetivo, así el marco muestral se construyó con los datos que el investigador obtuvo; por lo que, queda conformado de la siguiente manera, considerando las cifras oficiales de producción anual por estado ver Cuadro 2:

#### Cuadro 2: Determinación de la muestra

Unidad de análisis	Toneladas producidas en el año 2010	Tamaño de empresas
Empresas de Tamaulipas	0.7	Medinas
Empresas de Morelos	0.5	Pequeñas
Empresas de Puebla	No Disponible	Micro

Esta tabla muestra la población estudiada y el tamaño de la muestra del objeto de estudio

#### Cuadro 3: Bitácora de investigación de campo

Conceptos	Instrumento	fecha	
Identificación de la empresa	Pagina electrónica de SAGARPA Puebla	25 de abril 2012	
Localización de la empresa Contacto con el personal de la empresa Platica previa con la empresaria fijación de fecha para la visita	Directorio de RENDRUS SAGARPA Puebla Via telefónica Via telefónica	9 de mayo 2012 20 de junio 2012 30 de julio 2012	
Visita a la empresa	Guía de entrevista para la obtención de información	12 de septiembre 2012	

Esta tabla muestra la bitácora que apoyó la investigación de campo.

### Generalidades de la actividad de cultivo de langosta y el mercado

La langosta de agua dulce es un crustáceo astácido, y comercialmente se conoce como "red claw" o "crayfish". En México, se introdujo con fines comerciales y de investigación a principios de los 90's, y se establecieron algunas UPA's de producción en los estados de Morelos y Tamaulipas. A pesar del buen precio en el mercado, rápido crecimiento, poca agresividad, esta especie se considera altamente invasora con alto impacto a la biodiversidad del país. Actualmente, se reportan poblaciones en el medio natural en los estados de Tamaulipas (Reserva de la Biosfera "El Cielo") y Morelos ocasionando impactos adversos en los ecosistemas. Por lo cual, se recomienda realizar un análisis de riesgo antes de implementar el cultivo, así como obtener un resolutivo de impacto ambiental favorable para la misma, con la finalidad de asegurar el bienestar de los ecosistemas aledaños, la sustentabilidad del cultivo y la mitigación de impactos a la biodiversidad del país. Entidades con cultivo en México: Tamaulipas y Morelos.

### Mercado Del Producto: Nacional

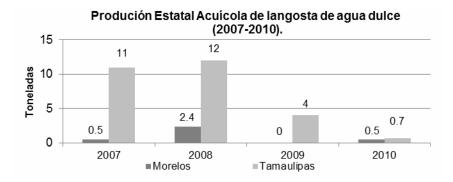
Puntos de ventas: Pie de granja, restaurantes, mercados locales, pescaderías y tiendas de autoservicio (Diario Oficial de la Federación 6 de junio 2012) ver Grafica 1 y 2.



### Grafica 1: Estadística De Producción

Fuente: Subdelegaciones-CONAPESCA (1999-2008). Se observa una baja en la producción en los últimos años

### Grafica 2:



Fuente: Subdelegaciones-CONAPESCA (2007-2010). En la grafica se presenta la producción nacional acuícola y Puebla o figura.

Como se puede apreciar Puebla no está considerada en los datos oficiales que reflejan la producción de langosta, lo cual presenta una gran área de oportunidad para la empresa caso de estudio.

### El Estudio De Caso

*Orígenes.*: Es una empresa (granja) que está localizada en el Municipio de Tepeojuma, Puebla. Sus inicios se remontan al año de 2006, con la elaboración de un proyecto que después de consultar varias alternativas la Sra. Sonia decide elaborarlo para producir y comercializar **langosta australiana** (Cherax Quadricarinatus). El proyecto lo inscribe en el Centro de Incubación de Empresas Base Tecnológica (CIEBT) de la Universidad Tecnológica de Puebla. Lo que le genera como beneficio recibir Capital Semilla fondo PYME, por Parte de la Secretaria de Economía en el mismo año 2006.En 2007 la señora Sonia decide comprar 4 hectáreas de terreno, con inversión propia, para instalar la empresa, con lo que se inicia la construcción de la granja, en ese mismo año recibe apoyo del programa Alianza para el campo para la terminar la construcción de los estanques y la adquisición de 4000 hembras y 2000 machos reproductores.2008 Es el año en que inicia operaciones la granja propiedad de la Sra.

Sonia con la producción y comercialización de langosta australiana. En el mismo año 2008, se recibió apoyo financiero para activos productivos, condicionado a que se transformara la forma de constitución de la granja para ser una sociedad y se constituye como Langostinos Tepeojuma, S.P.R de R. L. con siete socios. Y actualmente también se produce y comercializa tilapia además de la langosta.En un inicio la granja solo tenía 3 estanques, en el año 2009 el jefe de gobierno de Izucar de Mataros, Puebla se pone en contacto con la señora Sonia para invitarla a participar en La Red Nacional de Desarrollo Sustentable (RENDRUS) 2009 estatal, resultando ganadora, para participar en RENDRUS Nacional en Pachuca, Hidalgo. Lo que le permite recibir un nuevo apoyo financiero para construir el laboratorio y el restaurante.

*Estructura y operación de la empresa..:* Como ya se señaló la granja inicio operaciones en el año de 2008 con 7 socios, actualmente dirige la empresa la Sra. Sonia hay un gerente de producción y una gerencia de mercadotecnia y ventas, pero realmente trabajan en la empresa: la Sra. Sonia, un empleado de tiempo completo y dos hijos de la Sra. El empleado que labora toda la semana apoya en labores de mantenimiento de la granja, producción de langosta y tilapia, el restaurante funciona únicamente sábados y personas que asisten, la hija se desempeña como mesera y para las labores de cocina se contrata a una persona más. La venta del producto al consumidor se realiza a pie de granja a hoteles y ocasionalmente a restaurantes y en forma directa en el restaurante al consumidor final. También se venden juveniles de engorda y reproductores. Los empleados de la empresa (granja), tienen estudios de primaria.

Resumiendo; en la granja de manera formal existen 3 niveles jerárquicos, el de dirección, el de gerencias y el de los empleados. Por otra parte, de forma práctica existen únicamente 2 niveles jerárquicos el de dirección y el de los empleados de la granja. La granja es una microempresa que atiende un mercado local, nacional e internacional.

*Proceso de producción, productos y mercado.:* El proceso de producción se inicia con la recepción. de las langostas reproductoras, como segundo paso hay que climatizarlas, para propiciar la reproducción de juveniles, posteriormente se separan las hembras y se presenta la eclosión. Respecto a los juveniles hay que cuidar la calidad del agua y alimentarlos. Después de la eclosión se desarrolla la cría, engorda, cosecha clasificación, empaque y venta. El tiempo de reproducción y crecimiento de las langostas es de año y medio y la engorda de 7 a 9 meses. En el laboratorio las langostas se seleccionan por talla y se protegen de la luz, son animales muy sanos y generalmente mueren por stress. En los meses de noviembre y diciembre en el mismo laboratorio se preparan los animales para la reproducción.

La granja para su funcionamiento necesita contar con permisos de Impacto Ambiental y de la Comisión Nacional del Agua (CONAGUA). El insumo principal para la reproducción de la langosta además de los estanques es el agua, que a la granja llega de manantial. La Sra. Sonia recibió capacitación en dirección de empresas, administración, contabilidad, planes de negocios y respecto al manejo de su producto; contando con el apoyo del Instituto Poblano para la Productividad y Competitividad Empresarial en su programa financiamiento para aceleradora de Negocios. Para poderse involucrar en el manejo de la empresa llegando a dominar el tema y ella dar capacitación conjuntamente con una bióloga quien da asesoría a la granja y monitorea la calidad del agua. La capacitación se organiza en cursos con duración de 4 horas, desde hace tres años. Concretando las langostas se venden, cocinadas en el restaurante de la granja, langostas juveniles y langostas reproductoras de acuerdo a la capacidad de producción de la granja que es de 1.5 toneladas por año. El mercado atendido inicialmente era local

actualmente es Nacional, en el que se ofertan Juveniles, Reproductoras, venta en el restaurante de la granja y capacitación que se imparte en el mismo restaurante con un costo de \$ 900.00 por persona con una duración de 4 horas incluyendo la comida. Internacionalmente la granja tiene clientes en Guatemala a quienes abastece de juveniles y reproductoras. Actualmente uno de los tres estanques se utiliza para la reproducción de tilapia. A la tilapia es necesario hacerle una revisión semanal de su estado general. La granja se encuentra localizada en 4 hectáreas y su capacidad instalada comprende 3 estanques de 1000 metros cuadrados cada uno, un laboratorio y el restaurante con una pequeña alberca zona de juegos infantiles. La Sra. Sonia comenta: en la granja no hay servicio de luz, teléfono e internet, el lugar queda muy cerca de la carretera y para que pueda tener más visitantes hay que hacer un camino pero no sé si los vecinos lo permitan, apenas hace año y medio se construyó el nuevo camino por donde ahora se puede llegar a la granja. Los apoyos económicos y de capacitación recibidos de: SEMARNAT, CONAGUA Y SAGAPI han sido determinantes para el funcionamiento de la granja. Y respecto a RENDRUS lo que me aportó al participar con el proyecto fue publicidad.

No hay agrupaciones empresariales para empresas como la granja que yo dirijo y en Puebla y lugares cercanos no tengo competencia. En un futuro: Aproximadamente para 1.5 años, hay un convenio firmado para trabajar como franquicia. Con el apoyo de la empresa Fher and Fher. Se tiene contemplado aumentar la reproducción de tilapia. Mejorar la producción de la langosta en el laboratorio y convertir la granja en un lugar eco turístico.

*Análisis de los resultados.:* Considerando los datos que reflejan la situación de la empresa estudio de caso, se puede referir, que la granja ha establecido relaciones que le han permitido adquirir conocimientos principalmente con instituciones de gobierno. Retomando a Saexenian (1990; citado por Álvarez ,2007; Lara, 2006; citado por Anunziata y Macchiarola 2010 Casas 2001; citado por Prada, 2004; Tapia y Tapia, 2010): la empresa ha establecido colaboración, dentro de un grupo de individuos con una

agenda común para transmitir conocimientos, facilitando dar respuesta a desafíos y ayudarse a realizar actividades resultado de las relaciones formales o informales entre los actores que integran la red. Y como lo señala Basaldúa (2005; citado por Vera y Vera, 2011) son las redes sociales, es decir, aquellos lazos tanto formales como informales que se van generando entre la empresa - vía la figura del dueño, empresario v/o directivo - y los proveedores, clientes gobierno, etcétera. Son el vehículo para que la empresa pueda tener acceso a diferentes recursos, entre otros a distintos conocimientos que de otra forma no sería posible o muy difícil. La red construida por la empresa presenta de forma muy marcada el intercambio de conocimientos, experiencias y acciones entre los diferentes actores que participan notándose fuertemente la presencia por supuesto de la empresa además de la del gobierno.La empresa inicio a construir la red al participar en el año 2006 en el concurso organizado por el CIEBET, a partir de ahí se fueron generando diferentes relaciones que le han facilitado adquirir conocimientos de manera más pronta y aplicarlos en beneficio de la empresa. Como es la capacitación recibida que con posterioridad convirtió a la directora de la empresa en capacitadora generando una fuente adicional de ingresos. El gobierno a través de los diferentes organismos al ir estableciendo lazos con la empresa, está logrando metas y estadísticas en materia de sus actividades de apoyo y desarrollo de empresas. Finalmente se retoma a Casas (2003) Cuadro 1 para presentar resultados pero, señalando el intercambio con los diferentes actores que participan en la red, ver cuadro 4 y 5.

Cuadro 4: Resultados del análisis de la red de conocimiento para la Granja de langostas

Contexto institucional	Estructura o morfología de las redes	Dinámica: origen, desarrollo y trayectorias de las redes	Contenido: formas de intercambio e insumos que circulan	Resultados de las redes y del intercambio de conocimiento
DSe observa la presencia de instituciones de gobierno: y la presencia de una institución de educación superior.	La red se integra por la granja y las instituciones de gobierno principalmente, además de la UTP y otros actores como lo son clientes y proveedores. Creándose lazos entre los actores que han facilitado intercambio de conocimiento y logro de metas que no presentan costo financiero, se centran principalmente en la confianza y buena voluntad.	La red inicia con el vínculo establecido con la UTP, siguiendo la integración de otros actores, principalmente con instituciones de gobierno que apoyan a las empresas como SECOFI y SAGARPA. El vínculo con la UTP se va no sigue pero fue el que dio pie a que la empresa iniciara con operaciones y con la red. Con las instituciones de gobierno sigue el intercambio de forma esporádica en cuanto al intercambio de apoyos para la granja y cumplimiento de metas para las instituciones de gobierno.	Los insumos que circulan o se intercambian son principalmente apoyos financieros entre la empresa y las instituciones de gobierno seguido de la capacitación y gestión.	Los resultados obtenidos de la red son mejoras en la infraestructura, lo que ha permitido ampliar el giro de la empresa y tener amplios planes a futuro. Y capacitación que está convirtiendo al personal de la empresa en expertos en el giro.

Fuente: elaboración propia con datos de Casas (2003). En el cuadro se observan los resultados de la investigación de campo desde el considerando la propuesta de Casas, 2003.

El intercambio de conocimientos entre los integrantes de la red han sido precisos; experiencias empresariales y para el acceso a apoyos financieros.

Cuadro 5: Análisis de resultados de la red de la granja reproductora de langostas con los diferentes actores
que integran la red.

Estructura o Dinámica: direccionalidad, duración, frecuencia morfología comunicación y alcance de las redes (Integrantes)		Contenido: formas de intercambio e insumos que circulan	Resultados de las redes y del intercambio de conocimiento		
Instituciones de Educación Superior IES	Contactos personales del personal directivo de la empresa. Se observa una direccionalidad de ambas partes, una durabilidad que tiene su origen después de la formación de la empresa.	Información con respecto a diferentes apoyos financieros. Acceso a recursos, en este caso sobre infraestructura necesaria para que la empresa inicie y mantenga su actividad.	Generación de conocimiento sobre aspectos productivos. Información sobre tecnología.		
Empresarios	Contactos personales del personal directivo de la empresa. Se observa una direccionalidad de ambas partes, una durabilidad que tiene su origen después de la formación de la empresa. Construcción de la relación por interés de ambas partes. El inicio de la relación coincide con el inicio de las operaciones de la empresa.	Información con respecto a diferentes apoyos financieros. Acceso a recursos, en este caso sobre infraestructura necesaria para que la empresa inicie y mantenga su actividad.	Generación de conocimiento sobre prácticas empresariales.		
Proveedores	Contacto personal del de los directivos de la empresa. Construcción de la relación por interés de ambas partes. Se observa un intercambio frecuente de información y conocimientos sobre las características de calidad de los insumos y productos. Y al igual que la relación anterior, el inicio de la relación coincide con el inicio de las operaciones de la empresa.	Conocimientos, específicamente respecto a la tecnología e insumos. Acceso a recursos, en este caso a materias primas y maquinaria.	Maquinaria acorde a las necesidades y exigencias de los productos solicitados por los clientes, así como insumos.		
Clientes y usuarios	Contactos personales y página web. Por interés de ambas partes hay un intercambio cotidiano de información y este vínculo ha existido desde que inició operaciones la empresa.	Información sobre gustos y preferencias de sus clientes.	Productos que cumplen con las exigencias de los clientes.		
Asociaciones empresariales	No Aplica	No Aplica	No Aplica		
Administraci ón Municipal	Es una relación que surge como resultado de los contactos personales de la persona que dirige la empresa a través de diferentes programas estatales y regionales Se trata de una relación que surge por interés de ambas partes, pero en la que se observan intercambios esporádicos y que al igual que las otras relaciones surge después del inicio de la empresa.	Beneficios financieros.	Disposición de efectivo para la estructura de la empresa. Disposición de mejores flujos de efectivo.		
Admon. Estatal	Es una relación que surge como resultado de los contactos personales de la persona que dirige la empresa. Se trata de una relación que surge por interés de ambas partes, pero en la que se observan intercambios esporádicos y que al igual que las otras relaciones surge después del inicio de la empresa.	Beneficios financieros.	Disposición de efectivo para la estructura de la empresa. Disposición de mejores flujos de efectivo.		

Fuente: elaboración propia con datos del trabajo de campo, septiembre 2012. En el cuadro se los vínculos existentes entre los diferentes actores que participan en la red a la que pertenece la empresa caso de estudio.

La red iniciada por la empresa estudio caso se inicia con la presentación del proyecto ante la UTP y ha generado intercambio de conocimientos de conocimientos, como son experiencias empresariales información sobre el cultivo de la langosta cuyos resultados han sido benéficos para los involucrados en la red. Los resultados referidos se presentan desde diferentes ópticas para los involucrados con la red: para las instituciones educativas y de gobierno representan alcanzar sus metas y sus estadísticas, para la empresa mantenerse en el mercado y para la directora de la empresa contar con una capacitación de tal nivel que se ha convertido en capacitora. Sin embargo en términos generales para la empresa, la red ha sido un detonante para la permanencia crecimiento y desarrollo de la empresa, teniendo como punto medular la confianza y la reciprocidad en el intercambio de experiencias, conocimientos y beneficios. Vislumbrando un futuro prometedor para la empresa con un mercado local y regional sin competencia.

Lográndose reafirmar lo que autores que abordan el tema de redes conocimiento señalan en cuanto a la facilidad y rapidez para la transmisión de conocimientos, la existencia de confianza y reciprocidad a través de los vínculos que se construyen entre los diferentes actores que participan en la red.

Por otra parte, es necesario apuntar, que en el caso de esta empresa de dulces típicos su demanda es muy probable que vaya en aumento, y que cada vez haya más posibilidades para colocar sus productos en mercados más atractivos, tanto nacionales como internacionales, siempre y cuando puedan cumplir con la exigencias de calidad y volumen que estos mercados demandan.

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# VALIDEZ DE CONTENIDO DE UN INSTRUMENTO DE MEDICIÓN DE LA COMPETITIVIDAD DE LAS PYMES VITIVINÍCOLAS DEL VALLE DE GUADALUPE, B.C., MÉXICO

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# RESUMEN

Utilizando el modelo propuesto por Lawshe (1975) modificado por Tristán (2008), en este trabajo se presenta un examen empírico de la validez de contenido de un instrumento de medición de la competitividad de las pequeñas y medianas empresas vitivinícolas ubicadas en la Ruta del Vino del Valle de Guadalupe, en Baja California, a través de una Entrevista Conductual Estructura (ECE), en la que se evaluaron de forma separada todos los ítems que contiene el instrumento a partir de las valoraciones de un panel de 8 expertos, atendiendo a la escala donde 1) es Esencial, 2) Útil pero no esencial, y 3) No importante, con una Razón de Validez de Contenido (CVR) igual o mayor a 0.58. Se encontró que el valor mayor de validez de contenido de los ítems fue de 1.00 y el menor de 0.13. En sumatoria, el Índice global de la Validez del Contenido (IVC) mediante el Modelo de Lawshe modificado fue de 0.78 considerado aceptable

PALABRAS CLAVES: Validez de contenido, Modelo de Lawshe, Empresas vitivinícolas

# VALIDATION PROCESS OF COMPETITIVENESS SURVEY FOR WINE MAKING SMEs IN THE GUADALUPE VALLEY, B.C. MEXICO

# ABSTRACT

By using the model, proposed by Lawshe (1975) and modified with Tristan (2008), it is presented in this work an empirical examination of content validity obtained in this instrument of measurement in competitiveness with small and medium wine industry located in the wine route of Valle de Guadalupe, Baja California, across a Structured Behavioral Interviews (SBI); in which it has been evaluated in a separate form all the items that the instrument contains from the evaluations of an 8 experts' panels, attending the scale where 1) is Essential, 2) Useful but not essential, and 3) With not importance, with a Content Validity Ratio (CVR) equal or bigger than 0.58. It has been observed that the mayor value of content vality in the items was 1.00 and the minor was 0.13. In summary, the Content Validity Index (CVI) by means of the model, modified by Lawshe, was of 0.78 considered acceptable.

KEY WORDS: Content validity, Model of Lawshe, Wine industry

**JEL:** C52, L10

# INTRODUCCIÓN

La industria vitivinícola en México tiene una larga trayectoria histórica, prueba de ello ha sido la gran calidad en sus productos, lo cual ha despertado el interés y reconocimiento de los mercados internacionales, que han ido cambiando la imagen rústica de los vinos nacionales (Larousse de los vinos, 2008). Baja California (BC) es una entidad federativa del noroeste de México cuya actividad emblemática es la vitivinicultura la que es cualitativamente significante en términos de la alta calidad en

sus vinos; no obstante, debido a los obstáculos mencionados requiere fortalecer su competitividad tanto en el mercado interior como exterior (Sánchez, 2006). En esta región se elaboran alrededor del 90% de los vinos de mesa producidos en México. En este Estado, las principales zonas de producción de uva industrial son el Valle de Guadalupe y el Valle de San Vicente, localizados en el municipio de Ensenada; ambos concentran el 90% de la superficie cultivada que es de 3 100 hectáreas. Las principales varietades cultivadas son: Sauvignon Blanc, Cabernet Sauvignon, Chenin Blanc y Thompson (Armenta, 2004).

No obstante el gran potencial de la industria vitivinícola de BC para producir vino de alta calidad, los apoyos institucionales y/o públicos que se otorgan al sector vitivinícola son poco favorecedores de la competitividad por lo que es imprescindible que se establezcan propuestas en donde se planteen estudios más profundos sobre el análisis de los factores que afectan la competitividad, de tal forma que éstos redunden en el diseño de estrategias de negocio que permitan el buen posicionamiento de esta industria (Maldonado, Alcántar y López, 2008).Además de ello, la existencia de cambios en la economía mundial caracterizados por procesos de globalización, así como de avances científicos y tecnológicos, y de demanda de productos de mayor calidad, ha ocasionado que los patrones de producción, comercio e inversión, se encuentren en un proceso de cambio, obligando a los empresarios y directivos de las empresas a ser más competitivos para lograr obtener un lugar en los mercados globales (Chávez, 2004).

A pesar de la relevancia del tema y la importancia que tiene el sector vitivinícola en el país, existe un enorme vacío de información al respecto. Con la intención de aportar elementos que contribuyan a fortalecer el conocimiento del sector en la región, se desarrolla el presente estudio cuyo objetivo consiste en determinar la validez de contenido, a través del Modelo Lawshe (1975) modificado por Tristán (2008), de un instrumento construido para medir la competitividad de las pequeñas y medianas empresas (Pymes) vitivinícolas de la Ruta del Vino del Valle de Guadalupe localizada en Ensenada, B.C., México.

El propósito del estudio estriba en que una vez construido el instrumento de medición pueda servir identificar la posible asociación entre la competitividad de las Pymes vitivinícolas y las variables cooperativismo interempresarial, tecnologías de la información y comunicación y la oferta de actividades enoturísticas, lo cual proporcionará elementos que favorecerán la implementación de estrategias que permitan a los empresarios impulsar el desarrollo de sus negocios. La investigación se llevó a cabo aplicando una entrevista conductual estructurada a un grupo de ocho expertos con conocimiento previo en el área los cuales evaluaron de manera individual todos los ítems que integran el instrumento.

# METODOLOGÍA

Este trabajo se caracteriza por ser de tipo descriptivo con un diseño no experimental que presenta los resultados de un estudio empírico independiente a través de una entrevista conductual. Para obtener evidencia de que la definición semántica está correctamente representada en los ítems formulados se llevó a cabo la especificación del índice cuantitativo de la validez de contenido del instrumento mediante el Modelo de Lawshe (1975) modificado por Tristán (2008). Se trabajó con 8 expertos, cuatro en la parte metodológica y cuatro en el sector vitivinícola a quienes se les pidió que evaluaran por separado los ítems de un cuestionario de acuerdo a su relevancia definida como la importancia del ítem para la determinación de la competitividad de las pequeñas y medianas empresas vitivinícolas geográficamente ubicadas en la Ruta del Vino del Valle de Guadalupe en BC, con base en la siguiente escala: 1) Esencial, 2) Útil pero no esencial, y 3) No importante. El instrumento sometido a la validación quedó integrado por 77 ítems distribuidos en tres variables fundamentales (Cooperativismo interempresarial, Uso de tecnologías de la información y comunicación y Oferta de actividades de enoturismo) cuya técnica de escalamiento es de tipo Likert de cinco categorías de respuesta, presentándose de la siguiente manera: 1=Nada importante, 2=Poco importante, 3=Nada importante, 4=Muy importante, y 5=Totalmente importante.

La información recabada de los expertos se analizó a través de una hoja de cálculo de Microsoft Excel 2010 R y se determinó la razón de validez de contenido (*CVR y CVR*') para cada uno de los ítems mediante las ecuaciones descritas en el Modelo de Lawshe modificado (Tristán, 2008) y el Índice de Validez de Contenido (*CVI*) para el instrumento global.

Figura 1: Cálculo del Indice de Validez de Contenido

$$CVI = \underbrace{\frac{M}{\sum_{i=1}^{M} CVR_{i}}}_{M}$$

$$CVRi = \begin{bmatrix} Razón de Validez de Contenido de los ítems aceptables de acuerdo con el criterio de Lawshe} \\ M = \begin{bmatrix} Total de ítems aceptables en la prueba \end{bmatrix}$$

Ecuación empleada para el cálculo de validez global del instrumento

### RESULTADOS

Con base en el acuerdo de los expertos, se determinó la razón de validez de contenido (*CVR* y *CVR*') teniendo en cuenta el criterio modificado de Lawshe (Tristán, 2008), los ítems aceptables son aquellos cuya CVR' sea mayor a 0.58 (Heredia, Sánchez y Vargas, 2012). Los resultados se exhiben en la Tabla 1 y 2 en donde los items con un CVR' menores a 0.58 se muestran sombreados. En éstas se puede apreciar que los ítems 20, 26, 35, 38, 42, 43, 44, 60 y 61 fueron valorados con el puntaje máximo de validez del cuestionario (1.00); por el contrario los ítems 9, 12, 13, 21, 23, 24, 30, 33, 36, 45, 55, 56, 58 y 75 calificaron por debajo del valor aceptable (0.58) y por tanto serán eliminados del cuestionario.

Tabla 1: Razón de Validez de Contenido (Método Lawshe)

Variables	Indicadores	Ítem	Esencial	Útil pero no esencial	No importante	CVR	CVR'
		1	5	2	1	0.25	0.63
		2	7	1	0	0.75	0.88
	Necesidad de	3	7	1	0	0.75	0.88
	cooperación	4	5	2	1	0.25	0.63
	1	5	5	1	2	0.25	0.63
		6	6	0	2	0.50	0.75
		7	5	3	0	0.25	0.63
		8	6	2	0	0.50	0.75
		9	4	$\overline{2}$	2	0.00	0.50
Tipo actividad Cooperativismo interempresarial		10	6	$\overline{2}$	0	0.50	0.75
	Tipo de	11	6	1	1	0.50	0.75
		12	3	3	2	-0.25	0.38
	desarrollada	13	4	4	ō	0.00	0.50
interempresarial		14	5	3	ŏ	0.25	0.63
		15	5	1	$\tilde{2}$	0.25	0.63
		16	7	1	ō	0.75	0.88
		17	7	1	õ	0.75	0.88
		18	7	0	ů 1	0.75	0.88
		19	6	2	0	0.50	0.75
	Resultados	20	8	$\frac{2}{0}$	0	1.00	1.00
	obtenidos	20	3	4	1	-0.25	0.38
		22	6	0	2	0.50	0.75
		23	4	2	$\frac{1}{2}$	0.00	0.50
		23	4	2	$\frac{1}{2}$	0.00	0.50
	Barreras	25	5	2	ī	0.25	0.63

En esta tabla se describe la Razón de Validez de Contenido CVR y CVR' de los ítems que integran la variable Cooperativismo interempresarial. Este contenido forma parte de la Tabla 2

### CONCLUSIONES

Este estudio consistió en un examen empírico de tipo descriptivo con un diseño no experimental de la validez de contenido de un cuestionario, mediante el Modelo de Lawshe (1975) modificado por Tristán (2008), referente a la competitividad de las pequeñas y medianas empresas vitivinícolas de la Ruta del Vino del Valle de Guadalupe, basado en las opiniones de un panel de expertos.Con base en la determinación de la Razón de Validez de Contenido se descartan 14 items reduciendo con esto el cuestionario a solamente 63 ítems, distribuidos en tres variables. La variable Cooperativismo interempresarial se compone de 19 ítems, la variable Uso de Tecnologías de la información y Comunicación con 26 items y la variable Oferta de actividades enoturísticas quedo únicamente con 18 ítems. El Índice de Validez de Contenido (validez global) del instrumento fue de 0.78, lo que puede considerarse un resultado más que satisfactorio. Quedaría pendiente la aplicación de la prueba piloto para la determinación de la validez de constructo y la confiabilidad.

Tabla 2: Razón de Validez de Contenido	(Método Lawshe)	continuación
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Variables	Indicadores	Ítem	Esencial	Útil pero no esencial	No importante	CVR	CVR'
		26	8	0	0	1.00	1.00
		27	7	1	0	0.75	0.88
		28	5	0	3	0.25	0.63
	Infraestructura	29	5	1	2	0.25	0.63
	TIC	30	3	3	2	-0.25	0.38
		31	7	0	1	0.75	0.88
		32	5	1	2	0.25	0.63
		33	3	2	3	-0.25	0.38
		34	7	0	1	0.75	0.88
		35	8	0	0	1.00	1.00
		36	1	3	4	-0.75	0.13
	Usos de	37	5	3	0	0.25	0.63
	Internet	38	8	0	0	1.00	1.00
	internet	39	5	1	2	0.25	0.63
		40	7	1	0	0.75	0.88
Uso de las		41	7	1	0	0.75	0.88
tecnologías de la		42	8	0	0	1.00	1.00
información y la		43	8	0	0	1.00	1.00
comunicación	Tipo de	43	8	0	0	1.00	1.00
	actividad	44	4	2	2	0.00	0.50
	desarrollada	43	4 6	2	0	0.50	0.30
		40	6	2	0	0.50	0.75
		47	6	2	0	0.50	0.75
		48 49	6	2	0	0.50	0.75
	D. 14.1						
	Resultados	50	6	2	0	0.50	0.75
	obtenidos	51	6	2	0	0.50	0.75
		52	6	2	0	0.50	0.75
		53	5	3	0	0.25	0.63
		54	7	1	0	0.75	0.88
	D	55	4	2	2	0.00	0.50
	Barreras	56	4	2	2	0.00	0.50
		57	6	2	0	0.50	0.75
		58	4	1	3	0.00	0.50
		59	7	1	0	0.75	0.88
		60	8	0	0	1.00	1.00
		61	8	0	0	1.00	1.00
	Tipo de	62	5	2	1	0.25	0.63
	actividad	63	5	2	1	0.25	0.63
Oferta de	desarrollada	64	5	2	1	0.25	0.63
actividades de		65	5	2	1	0.25	0.63
enoturismo		66	5	2	1	0.25	0.63
		67	5	3	0	0.25	0.63
		68	7	1	0	0.75	0.88
	Resultados	69	6	2	0	0.50	0.75
	obtenidos	70	7	1	0	0.75	0.88
		71	7	1	0	0.75	0.88

	70	(	1	1		0.50	0.75
	72	6	1	1		0.50	0.75
	73	7	1	0		0.75	0.88
	74	5	2	1		0.25	0.63
Barreras	75	4	2	2		0.00	0.50
	76	5	2	1		0.25	0.63
	77	6	2	0		0.50	0.75
	SUMA	40	11	5	S=	34.75	48.88
	Máxima			Todos:	CVI=	0.55	0.78
	Mínima			Solo ítems aceptables:	CVI=	0.84	0.78

En esta tabla además de mostrar la Razón de Validez de Contenido de los ítems de las variables Uso de las tecnologías de la información y la Comunicación y Ofertas de actividades de enoturismo, se muestra la validez global del instrumento (CVI), considerado aceptable con un 0.78 (78%), con base en el criterio de los 8 expertos.

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# ESTUDIO DE LOS DE AMBIENTES DE APRENDIZAJE EN LAS PEQUEÑAS Y MEDIANAS EMPRESAS COMO DETONANTE DE ESTRATEGIAS QUE IMPULSEN LA COMPETITIVIDAD

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### RESUMEN

América Latina vive un crecimiento explosivo dadas las oportunidades y amenazas que la globalización le ha traído. Las empresas pequeñas y medianas requieren tener capacitación continua para responder con eficiencia a las demandas del entorno. Existen pocos y limitados espacios físicos dentro de estas empresas, en las que se pregona que lo más valioso que tienen es el recurso humano. La construcción de ambientes de aprendizaje se enfrenta a obstáculos que actualmente frenan el desarrollo de una amplia región latinoamericana. Los ambientes de aprendizaje siguen siendo tradicionales. Entonces ¿cómo es que siendo lo más valioso para la empresa, están en un posible abandono, sin inversión ni expectativas y expuestos a la obsolescencia galopante? La empresa del siglo XXI es proactiva, basa su éxito en las personas que trabajan todos los días en los diversos procesos que satisfacen necesidades de los clientes internos y externos de las empresas; generando valor agregado producido en sus mentes. La construcción de nuevos y mejores ambientes de aprendizaje incide directamente en la proyección de la competitividad hacia mejores niveles; transformando verdaderamente a la sociedad que reclama mejores respuestas a sus crecientes necesidades.

PALABRAS CLAVE: Aprendizaje, empresa, competitividad, desarrollo, valor agregado.

# THE STUDY OF LEARNING ENVIRONMENTS IN SMALL BUSINESS STRATEGIES AS A TRIGGER TO BOOST COMPETITIVENESS

#### ABSTRACT

Latin America is experiencing explosive growth due to opportunities and threats brought by globalization. SMEs need to have ongoing training to face effectively environmental demands. There are found few and limited learning places on these companies, where it is argued that human resources is the most valuable thing. The creation learning environments faces obstacles that currently stop development of a big Latin-American zone. Learning environments are still being traditional, then how all these environments are in an expected failure, with no investment, expectations and exposed to an imminent obsolescence being the most valuable thing in a company?. XXI century companies are proactive. Their success is based in the added value created in people's formation working everyday on internal or external customer service processes. The new and improved learning environment created will fall directly on the projection of better competitiveness levels, transforming significantly society that claims for better answers to their growing needs.

**KEYWORDS:** Learning, enterprise competitiveness, development, value-added.

#### Marco Teorico

La empresa es la única fuente de riqueza que tiene cualquier economía. Tiene una doble naturaleza. Es depositaria del conocimiento y es una institución gobernadora de intereses conflictivos. Los cambios que

presentan las empresas son producto de las acciones concretas de los seres humanos.

Recientemente, la formación del recurso humano enfrenta nuevos retos, que implican desde cambiar el concepto de recurso humano por el de capital humano o formación del equipo humano; hasta transformar su propia gestión a una más eficiente, humana y de bajo costo que invariablemente genere valor empresarial. Con ello, la función de RRHH confronta dos alternativas; comprometerse con la transformación organizacional o extinguirse.

El principal motivo para cambiar la gestión del RRHH es realinearla como función administrativa y volverla estratégica bajo un liderazgo efectivo que implique:

- a) Alinearse a la visión estratégica empresarial
- b) Articular una visión clara y redefinir lo que debiera ser la gestión del equipo humano competitivo.
- c) Enfocar la gestión del talento humano hacia los procesos empresariales, y éstos hacia la
- satisfacción del cliente interno y externo

Barnard (1968), destaca que la empresa está conformada por dos tipos de organización que son complementarios: la formal y la informal. También entiende por organización formal a la cooperación entre los hombres que es consciente, deliberada y dotada de un propósito. Habría que incluir entonces, que para llegar a ser una organización formal es necesario invertir tiempo y esfuerzo en formar a su gente. La inversión en capacitación es importante, pues si la empresa cuenta con trabajadores no calificados, esto puede traer como consecuencia bajos rendimientos de productividad, posible desperdicio de materiales, averías en maquinaria y equipos (Lazonik, 1993). Una empresa invertirá en el desarrollo de sus colaboradores, siempre; con el fin de que la organización despliegue y fortalezca sus estrategias de producto y de procesos (Porter, 1990). Sin embargo, la estrategia de inversión en capacitación no es suficiente para apoyar la generación de aprendizaje dentro de una empresa; requiere además de estructura social y cultural. Las prácticas de producción como la capacitación en el puesto de trabajo, la rotación de puestos, la organización de equipos de trabajo, el buzón de sugerencias, son vistas como un medio que permite que los trabajadores interactúen y compartan sus conocimientos y experiencias; promuevan la baja rotación de los trabajadores, permitiendo la conformación de mercados internos de trabajo, en el cual se ofrecen y demandan servicios completos con valor agregado.

La innovación en las empresas es esencialmente una cuestión de aprender a organizar la fusión y creación de conocimientos. En suma es un proceso de aprendizaje, el cual fomenta la invención, y ésta a su vez revoluciona el proceso productivo (Thomson, 1993<sup>a</sup>). La habilidad de una empresa de utilizar de manera eficiente tanto sus competencias internas (aprendizaje tecnológico y modos de construcción de conocimiento), como sus competencias externas (el uso del conocimiento externo a través del establecimiento de redes de relaciones sociales que la empresa establece con otras instituciones: proveedores, usuarios, universidades, centros de investigación, etc), le permite ofrecer mejores productos y servicios. El modelo japonés de gestión administrativa llamado de las 5 "S", se refiere al mantenimiento integral de la empresa, no solo de la maquinaria, equipo e infraestructura; sino del mantenimiento del entorno de trabajo por parte de todos. También se ha llamado "housekeeping que significa "ser amos de casa también en el trabajo"

Seiri	Clasificación y descarte
Seiton	Organización
Seiso	Limpieza
Seiketsu	Higiene y visualización
Shitsuke	Disciplina y compromiso

La aplicación de estas herramientas de trabajo dan resultados sencillos y efectivos, reflejados en calidad, eliminación de tiempos muertos, y reducción de costos.

#### **METODOLOGIA**

Para el desarrollo de este estudio, se formó un equipo de investigación colaborativa formado por consultores empresariales y académicos de instituciones de educación superior, enfocados al estudio de la situación empresarial de Hermosillo, Sonora, México.

*Objetivo:* Conocer la percepción del trabajador sobre el ambiente de aprendizaje en el que desarrolla conocimientos, habilidades, actitudes y valores utilizados en su desempeño laboral y proyectado en los resultados empresariales.

*Muestra:* Se tomó una muestra del 30%, del padrón de empresas de la Cámara Nacional de la Industria de la Transformación de Hermosillo (CANACINTRA), correspondiente a 600 empresas pequeñas y medianas. A continuación se aprecian los datos relevantes.

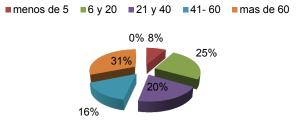
Figura 1: Clasificación de las empresas estudiadas.



Fuente: Elaboración propia

Figura 2: Estimación de colaboradores.

#### Estimación de colaboradores por empresa



Fuente: Elaboración propia.

El 49% de los encuestados, manifestó una inadecuada distribución del aire acondicionado, los equipos de aire hacen bastante ruido, y en algunas áreas no hay ventilación adecuada, resultando que el trabajador siempre desea terminar su jornada e irse.

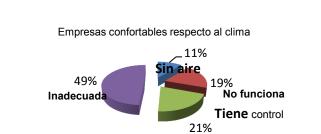


Figura 3: Percepción de los colaboradores respecto al clima físico.

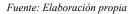
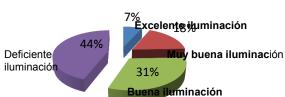


Figura 4: Percepción de los colaboradores respecto al ruido/lugar de trabajo.



Fuente: Elaboración propia.

Figura 5: Percepción de los colaboradores respecto a la iluminación de su área de trabajo.



Empresas confortables respecto a iluminación

Fuente: Elaboración propia.

Se mencionó además que las áreas de trabajo para innovación, son insuficientes ó no existen. Así como la apertura y/o disposición de voluntad de la dirección para ideas nuevas ó mejoras sustantivas al proceso de trabajo individual.

Figura 6: Empresas e Innovación.



Respecto al punto de higiene, el 77% opina que es bueno, El 42% de los trabajadores observa que en las empresas no existen áreas de descanso/esparcimiento/interacción y que solo un 8% de los lugares de trabajo cuentan con comedor para los empleados en excelentes condiciones.

Figura 7: Percepción de los colaboradores respecto a la higiene de su área de trabajo.



Fuente. Elaboración propia

Figura 8: Gráfico de empresas con tecnología para el desarrollo.

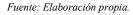
Empresas con tecnología para el desarrollo



Fuente: Elaboración propia.

Figura 9: Espacio destinado para la formación de capital humano.





La totalidad de los encuestados dijo tener un dispositivo móvil de uso personal, el cual está en uso constantemente. Algunos supervisores suelen quejarse de esta situación; ya que consideran a la tecnología móvil un fuerte distractor de la jornada de trabajo que se traduce en una fuga de tiempos y producción de errores.

Figura 10: Censo de capacitación 2011



Fuente: Elaboración propia.

Figura 11: Espacios de esparcimiento y convivencia para colaboradores de las empresas objeto de estudio.



Fuente: Elaboración propia.

# CONCLUSIÓN

Los resultados de este estudio arrojaron que aproximadamente 80% de los trabajadores no está motivado para aprender porque las condiciones físicas no permiten el desarrollo adecuado de las actividades de aprendizaje programadas para lograr un óptimo desempeño laboral. Solo un 20% dijo estar motivado. En general el encuestado dice tener la siguiente problemática: Interrupción constante de su trabajo por ruido, temperaturas extremas o no reguladas; considerando que el clima de la ciudad es excesivamente cálido, exceso de personas en su área de trabajo o espacio reducido, pobre infraestructura que promueva el trabajo colaborativo. El 85% de las personas encuestadas mencionó que los aspectos como: instalaciones, apariencia de su lugar de trabajo, color, luz, audio, entre otros, influyen en gran medida en el ambiente de trabajo y que consideran muy importante.

Los resultados nos indican la urgencia de implementar medidas correctivas en las organizaciones, con el fin de promover y desarrollar el talento humano; y con ello iniciar un verdadero proceso de transformación empresarial. Indudablemente, el punto de partida será trabajar con los líderes o directivos de ellas para despertar la conciencia primeramente, y luego implementar herramientas de gestión administrativa como pueden ser las Cinco "S" para modelarles a los colaboradores una nueva forma de trabajo de alta eficiencia, que sobre todo les provea, seguridad laboral, bienestar integral y desarrollo humano.En este sentido, la gestión de la administración de empresas debe continuar atendiendo las necesidades urgentes de la comunidad empresarial y coadyuvando con ello a mejorar su competitividad. Referencias BibliográficasBedoya Sánchez, Enrique Osvaldo, "La nueva gestión de personas y su evaluación de desempeño en las empresas competitivas", tesis digital, Universidad Nacional Mayor de San Marcos, Perú.Martínez, Adriana, "Capacidades competitivas en la Industria del Calzado de León" Ed.

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# LAS MARCAS COLECTIVAS, UNA ESTRATEGIA ADMINISTRATIVA PARA EL EXITO COMERCIAL DE LAS ARTESANIAS: CASO "LA CATRINA DE CAPULA, MICHOACÁN"

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### RESUMEN

En este artículo estudiaremos el caso particular de la artesanía denominada "La catrina de barro" que se elabora en el municipio de Capula en el estado de Michoacán de Ocampo en México, y el impacto positivo que ha tenido el instituir marcas colectivas entre los diferentes artesanos, productores y comercializadores que ha coadyuvado a un mejor conocimiento y comercialización en los mercados tanto nacionales como internacionales de estas piezas, así mismo ha ayudado a la conservación de esta milenaria tradición de la elaboración de piezas de barro en la citada comunidad.

El estudio es una comparación de la comercialización de este producto, antes y después de la introducción de marcas colectivas como estrategia administrativa para su posicionamiento, permanencia y desarrollo. Tratando de demostrar con ello el impacto positivo y la correlación entre la implementación de esta estrategia y el éxito del producto.

PALABRAS CLAVES: Artesanía, éxito comercial, estrategia administrativa, marca colectiva.

# COLLECTIVE BRANDS, A MANAGEMENT STRATEGY FOR THE COMMERCIAL SUCCESS OF CRAFTS: CASE "CATRINA CAPULA, MICHOACÁN"

# ABSTRACT

In this article we study the case of the clay hand-craft called "La Catrina de Barro", which is made in Capula Michoacán, México, and the positive impact that it has had to institute collective brands among the different craftsmen, producers and sellers and its contribution to a better knowledge and national and international commercialization of these pieces. It has also helped the conservation of a millenarian tradition to produce mud pieces in the community. This study is a comparison of the commercialization of such product, before and after the introduction of collective brands as an administrative strategy for its positioning, permanency and development. We will try to demonstrate the positive impact and the correlation between the implementation of this strategy and the success of this product.

KEYWORD: Hand-crafts, commercial success, administrative strategy, collective brands.

# **INTRODUCCIÓN**

Las artesanías, en cualquier lugar, expresan realmente los valores de la sociedad y la singularidad cultural de una nación. Mientras que en todo el mundo occidental industrial los artículos producidos en masa sustituyen a las artesanías, en México miles de artesanos perpetúan las tradiciones que aprendieron de sus antepasados. Esto refleja no sólo un profundo aprecio por la tradición, pero también la necesidad de crear "objetos mexicanos" que se ajustan a las necesidades cotidianas, y que permiten la supervivencia durante periodos de dificultades económicas. En México, todavía es más razonable regatear mercado diario al aire

libre el precio de una olla de barro hecha a mano, que comprar una olla de acero inoxidable en un supermercado urbano.

La agencia de gobierno, El Fondo Nacional de Artesanías (FONART), promueve la supervivencia de las artes regionales con temas tales como "El arte popular es patrimonio cultural de México. Es y seguirá siendo, un gran éxito mientras la demanda de los locales y los turistas se cumplan, porque la mayoría de los productos de esta industria artesanal están destinadas al mercado local.

Esta creatividad exuberante a menudo desdibuja la línea ya difusa frontera entre la artesanía y el arte fino. La práctica repetitiva de toda la vida de hacer formas, diseños y patrones tradicionales profundiza la habilidad del artesano y le permite dar rienda suelta a sus fuerzas creativas.

Para esta paleta increíblemente amplia de habilidades artísticas tradicionales, México cuenta con una gama igualmente variada de fuentes: el componente precolombino, la de años de colonización con fertilización cruzada, las fiable tradiciones que siguen perseverando de los distintos grupos étnicos a nivel regional, y la influencia constante de la cultura mestiza predominante que quiere conectarse a la sociedad moderna. Por un lado, intenta celosamente proteger el patrimonio nacional y por otro es incapaz de escapar de la amenaza siempre presente de la normalización global y la producción en masa. (Kernecker, 2005)

Michoacán, estado de gran riqueza en recursos naturales, tradiciones culturales, manifestaciones artísticas; gente con tendencias a conservar las costumbres a través del cambio enriquecido con nuevos conocimientos y experiencias.

En el ramo artesanal importantes son sus manifestaciones artísticas del cobre martillado, las lacas incrustadas, la madera tallada, las fibras naturales, los textiles y la alfarería; artesanías que reflejan la riqueza de los recursos importantes con los que cuenta el estado.

La artesanía es una actividad de gran tradición en nuestro país y en nuestro estado, que absorbe una gran cantidad de mano de obra especializada y que produce artículos únicos por su belleza y calidad artística, ampliamente demandados en el exterior.

Dentro de las artesanías, la alfarería ocupa un lugar destacado desde tiempos inmemorables, la frágil permanencia de la cerámica constituye uno de los mejores testimonios de culturas antiguas ya desaparecidas.

La alfarería de Capula..., Michoacán, al igual que otras manufacturas del estado y del país, están viviendo una de las crisis más profundas. Sin embargo, las diferentes localidades artesanales de la entidad cuentan con recursos endógenos (materia prima, recursos humanos, cultura, etc.) importantes para hacer de esta actividad la punta de lanza para iniciar la recuperación económica artesanal. (Duarte Duarte & Yeverino Juárez, 2007)

De lo anterior se deriva la importancia de hacer un estudio que demuestre que el uso de las estrategias administrativas, más específicamente las alianzas estratégicas enfocadas a la construcción de marcas colectivas, pueden ser una gran oportunidad para el crecimiento y desarrollo de tan margina actividad.

# **REVISION DE LA LITERATURA**

Al hacer una revisión de la literatura administrativa, vemos que hoy en día es muy común el término de administración estratégica.

Así pues Fred R. David la define como el arte y la ciencia de formular, implementar y evaluar decisiones multifuncionales que le permitan a una organización lograr sus objetivos. Como la misma definición implica, la administración estratégica se enfoca en integrar la administración, el marketing, las finanzas y la contabilidad, la producción y las operaciones, las actividades de investigación y desarrollo, así como los sistemas computarizados de información para lograr el éxito de la organización. (David, 2008)

Una empresa logra la competitividad estratégica cuando tiene éxito en formular e implementar una estrategia que crea valor. Una estrategia es un conjunto de compromisos y acciones, integrados y coordinados, diseñados para explotar las competencias centrales y lograr una ventaja competitiva. Cuando las empresas se deciden por una estrategia deben elegir de entre distintas alternativas. En ese sentido, la estrategia que elige una empresa indica lo que pretende hacer y lo que no tiene intención de hacer. (Hitt, Ireland, & Hoskisson, 2008)

La administración estratégica puede considerarse un sinónimo de planeación estratégica, y pese a que este término se acuño en la década de 1950 y fue de uso común desde mediados de la década de 1960 hasta mediados de la siguiente. En aquella época se creía que la planeación estratégica era la respuesta a todos los problemas. En ese entonces, la mayor parte del mundo corporativo de Estados Unidos estaba "obsesionado" con la planeación estratégica. Sin embargo después de ese auge, durante la década de 1980 el concepto dejó de usarse luego de que diversos modelos de planeación no reportaron los altos rendimientos que se esperaba. Con todo, la década de 1990 trajo consigo un resurgimiento de la planeación estratégica, y en la actualidad el proceso se practica de manera amplia en el mundo empresarial. (David, 2008)

Entonces una de las principales responsabilidades de los gerentes es posicionar sus organizaciones hacía el éxito con el establecimiento de metas y estrategias que puedan mantener competitiva a la organización. (Daft, 2011)

Se concluye entonces que es de suma importancia que cualquier empresa independientemente de su giro, tamaño, industria, posicionamiento, etc., debe de tomar en cuenta la administración y sus estrategias para garantizar el crecimiento y la permanencia en los mercados, cada día más exigentes.

Por otra parte es importante, para el estudio de este caso en particular, conceptualizar lo que es una marca colectiva para tratar de establecer su importancia como estrategia administrativa en el éxito comercial de las artesanías mexicanas, particularmente en el caso de "La Catrina de Barro" de Capula, Michoacán. Según el Instituto Mexicano de la Propiedad Industrial (IMPI), Marca colectiva es la marca de una asociación o sociedad de productores, fabricantes, comerciantes o prestadores de servicios, legalmente constituidos, para distinguir en el mercado los productos o servicios de sus miembros, respecto de los productos o servicios de terceros que no formen parte de esas asociaciones o sociedades.

Artículo 96 de la Ley de la Propiedad Industrial.- Las asociaciones o sociedades de productores, fabricantes, comerciantes, prestadores de servicios, legalmente constituidos, podrán solicitar el registro de marca colectiva para distinguir, en el mercado, los productos o servicios de sus miembros respecto de los productos o servicios de terceros.

Artículo 98 de la Ley de la Propiedad Industrial.- La marca colectiva no podrá ser transmitida a terceras personas y su uso quedará reservado a los miembros de la asociación. (CÁMARA DE DIPUTADOS DEL H. CONGRESO DE LA UNIÓN, 2012)

¿Qué garantías ofrece una Marca Colectiva? Certifica la autenticidad y calidad del producto artesanal. Preserva y rescata la producción de las artesanías y las técnicas empleadas para su elaboración, atendiendo a su calidad, representatividad, tradición, valor cultural, intencionalidad simbólica y diseño. Fomenta y promueve la calidad de las artesanías como medio para desarrollar una actividad económica, así como para la comercialización de los productos en el extranjero.

¿Qué beneficios ofrece la Marca Colectiva?

Protege las artesanías de posibles copias en toda la República Mexicana y en el resto del mundo a través de los derechos legales que le confiere el registro de la marca.

Usa el símbolo MR, para notificar al mundo el registro de Marca.

La Marca Colectiva desalienta a los "piratas" a copiarla, ya que cuenta con elementos legales para defender sus derechos.

Protege la prioridad del registro de la "Marca Colectiva" en otras naciones. Permite restringir la importación de bienes que utilizan marcas "piratas".

Garantiza el producto con la Marca. (Casa de las Artesanias del Estado de Michocán de Ocampo, 2012) Michoacán es el estado número uno en el establecimiento de marcas colectivas de ahí la importancia de analizar este caso, ejemplo para otras artesanías en otras regiones del país. Aunado al registro de las marcas colectivas, existe también la figura de "denominación de origen" que estas particulares piezas también poseen.

Artículo 156 Ley de la Propiedad Industrial.- Se entiende por denominación de origen, el nombre de una región geográfica del país que sirva para designar un producto originario de la misma, y cuya calidad o característica se deban exclusivamente al medio geográfico, comprendido en éste los factores naturales y los humanos.

Artículo 157 Ley de la Propiedad Industrial.- La protección que esta Ley concede a las denominaciones de origen se inicia con la declaración que al efecto emita el Instituto. El uso ilegal de la misma será sancionado, incluyendo los casos en que venga acompañada de indicaciones tales como "género", "tipo", "manera", "imitación", u otras similares que creen confusión en el consumidor o impliquen competencia desleal.

Artículo 158 Ley de la Propiedad Industrial.- La declaración de protección de una denominación de origen, se hará de oficio o a petición de quien demuestre tener interés jurídico. Para los efectos de este artículo se considera que tienen interés jurídico:

- Las personas físicas o morales que directamente se dediquen a la extracción, producción o elaboración del producto o los productos que se pretendan amparar con la denominación de origen;
- II.- Las cámaras o asociaciones de fabricantes o productores, y
- III.- Las dependencias o entidades del gobierno federal y de los gobiernos de las entidades de la Federación. (CÁMARA DE DIPUTADOS DEL H. CONGRESO DE LA UNIÓN, 2012)

Alfararería Tradicional de Capula, Michoacán

El trabajo del barro, que crea formas bellas y útiles, se practica desde hace miles de años en las comunidades del estado de Michoacán y el paso del tiempo al contrario de muchas tradiciones cerámicas no ha afectado en absoluto la riqueza de nuestra tradición alfarera. Cada región del estado guarda coincidencias en algunos procedimientos de las técnicas, sin embargo, cada una de ellas imprime rasgos característicos de su comunidad y medio geográfico, como es el caso de la comunidad de Capula, que a lo largo de los años, ha adquirido gran reconocimiento no solo en el interior del estado sino a nivel nacional, por su diversidad en producción alfarera.

La Alfarería Tradicional de Capula es muy característica y se puede distinguir fácilmente de la alfarería de otras regiones porque sus diseños son casi siempre abstracciones de flores y hojas pintadas con color blanco, un fondo café obscuro y verde, utilizando pinceles de pelo de cola de ardilla.

Esta alfarería requiere de dos quemas para alcanzar su acabado: una para cocer, la otra para vidriar o esmaltar y darle así a la pieza impermeabilidad y brillo. Se decora en crudo con engobes coloreados a base de pigmentos y óxidos minerales y su terminado se conoce como vidriado.

En la actualidad para la creación de estas piezas, se siguen utilizando los hornos tradicionales hechos por los propios artesanos con adobes y leña para la quema, trabajan con dos tipos de tierra, una bofa arenosa de color blanco y la otra maciza de color roja que se caracteriza por su elasticidad. El proceso de elaboración implica varias quemas, se utilizan moldes y un ocote para alisar la pieza y cubrir las fisuras que quedan al unir las partes que la integran.

En la comunidad de Capula podremos encontrar una gran diversidad de utensilios tradicionales dentro de la cocina mexicana, como son ollas y cazuelas de diferentes dimensiones, comales, platones y platos; jarros de diferentes formas y tamaños, vajillas y juegos de agua, además de macetas para uso decorativo.

A partir de los años 80's además de producir loza para uso domestico, los artesanos comenzaron a trabajar la escultura con las ya muy conocidas Catrinas y Calaveras de barro.

La producción de las Catrinas de Barro es, una alternativa artesanal de los alfareros de Capula. Son esculturas trabajadas con la técnica del pastillaje, Se prepara el barro y se modela, según cada artífice, a mano, con torno primitivo y/o con torno alfarero; se alisa el barro con tepalcates y se bruñe con piedra de río; con la técnica de *pastillaje* se aplican flores, hojas y guías y otros elementos decorativos sobre la pieza. Quienes utilizan engobes los diluyen en agua y aplican sobre la pieza terminada. Se queman en horno circular, cocidas al natural o vidriadas; algunas son pintadas con engobes de colores y otras decoradas en frío con pinturas acrílicas o vinílicas. (Casa de las Artesanias del Estado de Michocán de Ocampo, 2012)

Capula se localiza al Oeste de Morelia, a 17.5 kilómetros por la carretera federal No. 15 Morelia-Guadalajara.

Su nombre proviene de las palabras náhuatl "capulín" y "an", que significa "lugar de capulines".

Lugar donde la tradición guarda celosamente las técnicas antiguas de la fusión indígena y española para la elaboración de su alfarería, artesanía de la población con una experiencia y habilidad únicas.

El 12 de junio de 1863 deja de ser Municipio y pasa a ser Tenencia de la ciudad de Morelia.

A la Tenencia la integran las comunidades de Capula, El Correo, Iratzio, Joyitas, Las Trojes, San Bernabé y Buenavista.

Una de las actividades principales de la población es la elaboración de artesanías, de donde depende gran parte de la economía de sus habitantes.

Capula es el único pueblo del estado que cuenta con Región de Origen para tres tipos de artesanía de barro, la alfarería punteada, Catrinas de barro, loza tradicional.

En materia turística los principales atractivos de Capula son las artesanías de barro cocido en hornos dos veces. La primera a más de 1,200 °C, y luego de colocársele la "greta" (material mineral para vidriar el barro) se cuece nuevamente a 1,800°C.

El pueblo cuenta con talleres de exhibición, donde sus artesanos trabajan el barro con un deleite y dedicación que dan como resultado una de las riquezas artesanales para el estado.

Los orígenes de la alfarería en Capula datan del año 1550, cuando el fraile Vasco de Quiroga trajo el oficio del barro, y debido a que se cuenta con la materia prima en las cercanías del lugar, este oficio ha crecido constantemente y se conserva hasta nuestros días.

Existen diferentes técnicas de elaboración de piezas de barro. Una de ellas es la tradicional, donde se utiliza el horno de leña, que no es tan resistente a las altas temperaturas y como tal resulta más económica; la siguiente es donde de utiliza un horno de alta temperatura a base de gas, lo cual hace que las piezas tengan una mayor resistencia y un acabado más fino y su precio es más elevado.

Capula es reconocida a nivel internacional, por el arte que se refleja en cada una de las piezas que han sido presentadas en muestras y concursos.

Aunque Capula no es pródiga en belleza urbana en comparación con otros sitios, la intensa actividad artesanal que en ella se desarrolla la llena de vida durante todo el año. Más aún, para revestir su fiesta patronal, los alfareros organizan desde hace muchos años un concurso artesanal, donde premian el mejor trabajo; dichoso aquel que gana el premio, porque sus piezas serán bien vendidas y tendrá el reconocimiento del gremio.

Finalmente, otro de los sitios importantes de conocer en Capula es la Casa Taller del pintor y escultor Juan Torres, creador de las famosas "Catrinas", peculiar expresión popular de nuestra muy mexicana concepción de la muerte.

#### LAS CATRINAS LLEGARON PARA QUEDARSE EN CAPULA

El jefe de tenencia de Capula, José Luis de la Cruz Neri, aseguró que actualmente debe haber unos 200 talleres de Catrinas en esta localidad, que es una actividad que ha cobrado arraigo desde que fueron introducidas en 1980 por el escultor Juan Torres.

"La mayoría de la comunidad de Capula se dedica a trabajar las Catrinas, aunque también hay alfarería tradicional, casi todos prefieren estas piezas que son reconocidas en el mercado nacional e internacional".

Indicó que actualmente existen tres marcas colectivas, lo que les ha permitido tener una mejor comercialización, siendo la Catrina la que ha mantenido la economía del lugar y ha reducido la migración hasta en un 50 por ciento menos por año.

"La Catrina llegó para quedarse en Capula, la primera familia es la de Alvaro de la Cruz, con todos sus hijos, todavía no tiene nietos pero se va a transmitir esto, la Catrina será el símbolo de Capula por muchos años". (xhenhuaro)

En el año de 2007, trece ramas artesanales de Michoacán, México recibieron el reconocimiento del Instituto Mexicano de Propiedad Industrial (IMPI), como marca colectiva Región de Origen, (Casa de las Artesanias del Estado de Michocán de Ocampo, 2012).

Señaló que se trata de los diablitos de Ocumicho; las piñas de barro originarias de San José de Gracia; las ollas de Zipiajo; los rebozos de Aranza; la cantera de Morelia y la alfarería tradicional de Capula. También, las catrinas de barro de Capula; los huanengos y las ollas de Cocucho, la alfarería de Zinapécuaro; los muebles artesanales de Cuanajo y los bordados de Terecuato, al cobre de Santa Clara; a las guitarras de Paracho; a la pasta de caña de maíz y al maque.

Se señala también que la marca colectiva ofrece ventajas, como el dar una imagen unificada al producto en el mercado, estandarizar el proceso de producción y la adquisición de insumos.

Además, constituye una herramienta que permite al gobierno llevar un control de los apoyos otorgados a los micros, pequeños y medianos empresarios.

Con estos 13 reconocimientos se benefician a unos dos mil artesanos y se protegen unos cinco mil empleos generados a raíz de la producción de artesanías. (Casa de las Artesanias del Estado de Michocán de Ocampo, 2012)

Son este tipo de protección y estrategia administrativa lo que ha logrado posicionar a muchos de los productos michoacanos, en mercados internacionales, tales como el Aguacate, la Charanda, El queso Cotija, el cual en 2006 ganó un premio internacional en un concurso en Cremona, Italia, como el mejor queso extranjero.

# LAS MARCAS COLECTIVAS EN EL EXTRANJERO

Fuera de México las cosas no son diferentes, el registro de marcas colectivas y de la denominación de origen se ha usado en todo el mundo y en distintos momentos uno de los más antiguos acepciones fue en el Convenio de París o CUP; es un tratado internacional multilateral administrado por la Organización Mundial de la Propiedad Intelectual (en adelante OMPI) en cuyo texto inicial de 1883 no contenía disposiciones sobre indicaciones de procedencia o denominaciones de origen. Fue en la revisión de Washington de 1911 que se introdujeron las indicaciones de procedencia y en la revisión de La Haya de 1925 se incluyeron las denominaciones de origen.

Dentro de la protección de propiedad industrial, el CUP protege las indicaciones de procedencia y denominaciones de origen a través de la competencia desleal, esto es, de manera indirecta por medio de las indicaciones falsas de procedencia. Es así que, en el artículo 10, inciso 1), del citado tratado se establece la obligación de los países miembros de tomar medidas concretas, como el embargo en la frontera o en el interior del país y la prohibición de importación para impedir y/o prohibir el comercio de productos utilizando una indicación falsa de procedencia.

La prohibición abarca el uso de indicaciones falsas directas (nombre de un lugar determinado) e indirectas tales como el uso de adjetivos, imágenes, figuras o símbolos que denotan una falsa procedencia, así como su uso en publicidad o literatura comercia. En México; las disposiciones del convenio de Paris se aplican a todas las figuras de propiedad industrial, es decir, a las invenciones, diseños industriales, modelos de

utilidad, las marcas de fábrica o de comercio, los nombres comerciales, las indicaciones de procedencia e incluye disposiciones relativas a la competencia desleal.

Para el caso de México se publica un acta en la Sección Primera el Diario Oficial de la Federación, el sábado 11 de julio de 1964, la anterior Acta de Revisión fue aprobada por la H. Cámara de Senadores del Congreso de la Unión el día veintiséis del mes de diciembre del año de mil novecientos sesenta y dos, según decreto publicado en el "Diario Oficial" de la Federación del día treinta y uno del mismo mes y año.

Que fue aceptada por Presidente de la República el día diecinueve del mes de diciembre del año de mil novecientos sesenta y tres, habiéndose efectuado el depósito del Instrumento de Adhesión respectivo ante el Gobierno de la Confederación Suiza, el día veintiuno del mes de febrero del presente año (DOF, 1964) y que le da respaldo y lo agremia a los países que participaron de este convenio y se agregaron posteriormente con el fin de cumplir y hacer cumplir lo que en este se estipula.

México refleja en su legislación nacional todas las disposiciones del Convenio de París, protegiendo todas las figuras de propiedad industrial y observando los principios a que dicho Convenio hace referencia.

El IMPI en cumplimiento a las obligaciones derivadas del Convenio da seguimiento, entre otras, a las disposiciones del artículo 60 sobre la protección de emblemas de Estado, siglas, punzones oficiales de Estado y de organismos internacionales, otorgando o negando protección al emblema en cuestión.

La Asamblea de la Unión de París se reúne anualmente y el IMPI participa activamente. En dichas reuniones se anuncia la adhesión de nuevos países, se aceptan Estados u otras organizaciones en calidad de observadores o se nombran cargos de presidente o vicepresidente de la Asamblea. Asimismo se tratan cuestiones sobre el mantenimiento y desarrollo de la Unión y la aplicación del Convenio de París y en su caso, cuestiones sobre análisis y adopción de propuestas de modificación. (IMPI, 2009)

Y en otros países también se implementan las marcas colectivas y de denominación de origen para su mejor comercialización y presencia en los mercados internacionales por ejemplo 40 % de los consumidores están dispuestos a pagar 10% más en la Unión Europea por productos respaldados con una marca de denominación de origen. Fuente: Comisión Europea 2003.

En China su durazno en cuanto se vende con Indicaciones Geográficas (IG) o denominación de origen sube de 1.5 A 4.5 Yuanes. Fuente: Symposium de IG'S. OMPI. Beijing, 2007. Desde que sus vinos tienen IG; en Australia han pasado de exportar 5000 cajas al Reino Unido en 1986 al millón de cajas en 1994.

Fuente: Symposium de IG'S. OMPI. Mérida, 2003.

Al igual que en otros lugares del mundo en México y en el caso particular de Michoacán y de "Las Catrinas de Barro" de la comunidad de Capula este tipo de medidas administrativas y legales de impacto internacional han hecho mella en la comercialización de tan apreciados artículos y por consecuencia en la elaboración, desarrollo y divulgación de las mismas.

Aunque es algo complicado cuantificar numéricamente la dimensión del beneficio comercial después de la implementación de la marca colectiva de denominación de origen; sin embargo es a todas luces claro el beneficio e impacto positivo de haber llevado a cabo tal media y una de las formas más palpables de este beneficio se refleja en la migración de los pobladores de esta comunidad.

Michoacán es uno de los estados con mayor migración hacia los Estados Unidos de Norteamérica y la

población de Capula era un claro ejemplo de ello, pero luego de la implementación y registro de tres marcas colectivas de denominación de origen para las artesanías de este lugar, este fenómeno migratorio se vio reducido considerablemente, como lo pone de manifiesto el jefe de tenencia de Capula, José Luis de la Cruz Neri.

Por lo que luego de concluir el beneficio tanto comercial como social que tuvo está comunidad después del registro de sus marcas es inminente la recomendación a otras industrias marginadas en cualquier comunidad del Estado de Michoacán y en general de México como una oportunidad de crecimiento y desarrollo; tanto de sus productos como de sus poblaciones.

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# MÉTODO PARA DETERMINAR LAS VARIABLES DE INVESTIGACIÓN Y SU JERARQUÍA ACORDE AL GRADO EN QUE INCIDEN EN LA COMPETITIVIDAD INTERNACIONAL DE LAS EMPRESAS PORCÍCOLAS DEL CENTRO OCCIDENTE DE MÉXICO

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#### RESUMEN

En este artículo se sugiere un método que ayude a determinar las variables más relevantes que inciden en la competitividad internacional de las empresas porcícolas del centro occidente de México. La metodología utilizada para elaborar el presente documento es no experimental transversal descriptiva, en la que se aplicó el método causal correlacional deductivo, al ir de lo general a lo particular, es decir se partió de la competitividad en sus aspectos generales para entrar a cuestiones más específicas como la aplicación de la competitividad en el giro específico de la producción y comercialización de productos cárnicos de cerdo y sus derivados, a través del análisis de los participantes y "stakeholders" (tenedores de interés) de la cadena de valor porcícola y las variables que se originan debido a su interacción para crear una oferta de valor atractiva para el mercado internacional (concretamente el mercado chino); es importante mencionar que la investigación es de carácter mixto al obtener datos cualitativos a través de entrevistas con empresarios sobresalientes de la región mencionada que participan a lo largo de la cadena de valor porcícola y datos cuantitativos obtenidos mediante información documental en fuentes primarias o secundarias. Los resultados de dichas entrevistas y la información obtenida se procesaron con un enfoque sistémico y nos arrojan los elementos suficientes para utilizar el método de frecuencias de variables y el método de jerarquización analítica de Thomas Saaty, para identificar en orden de importancia las variables que más inciden para ser competitivos en el mercado internacional. Lo anterior cobra relevancia dada la ventana de oportunidad que se visualiza por la apertura comercial vigente con diversas naciones y los nuevos acuerdos o tratados que se están consolidando con otras naciones para comercializar cárnicos de cerdo, como es el caso de la República Popular China.

**PALABRAS CLAVE:** Competitividad / Enfoque sistémico/ Ventaja competitiva/ Stakeholders / Cadena de valor / Creación y entrega de valor / China / Frecuencia de variables / Método de Jerarquización analítica de variables.

# METHOD TO IDENTIFY THE VARIABLES AND THEIR HIERARCHY ACORDING TO THE INCIDENTIAL DEGREE TO DETERMINE THE INTERNACIONAL COMPETITIVENESS LEVEL IN INTERNATIONAL PRODUCTION AND PORK TRADING IN MEXICO.

#### ABSTRACT

This article suggests a useful method to determinate the most important variables that affect the international competitiveness of pork production and trader companies, located in Mexico. The methodology used in the investigation is non experimental, transversal descriptive; causal correlational and deductive, because it describes issues of competitiveness in general and focuses on issues of competitiveness in production and pork trading, the analysis of the participants and "stakeholders"

(interest holders) of the pork value chain and the different variables that are involved and interact to create an attractive value proposition for the international market (especially the Chinese market), it is important to mention that the research is also mixed because we used qualitative data obtained in interviews with outstanding entrepreneurs of the center of the country (Mexico) involved along the value chain and quantitative data obtained from documentary information in primary or secondary sources. The results of these interviews and information research were processed with a systemic approach using the method of variable frequencies and the method of Thomas Saaty's analytical hierarchy, in order to identify which variables are involved and which ones are the most influent to be competitive in the international market. This research gets particularly relevancy, given the window of opportunity that is displayed by the current trade liberalization with various nations and new agreements or treaties that are being consolidated between Mexico and other nations to sell pork, as the case of the Republic of China.

#### **JEL:** M16

**KEY WORDS:** Competitiveness / Systemic Focus / Competitive Advantage / Stakeholder / Chain value / Creating and value delivering / China / Frequencies of variables / Variables / Analytical hierarchy method.

#### INTRODUCCIÓN

El problema que se resuelve en el presente artículo obedece a la necesidad que tienen las empresas del centro occidente de México, por conocer que tan competitivas son para participar con éxito en el mercado internacional de cárnicos de cerdo, por lo que se determinará la competitividad desde dos enfoques, el primero es la capacidad funcional, entendida como el conjunto de capacidades que bajo un modelo de negocio rentable les permite participar en la cadena de valor del sector porcícola de manera sustentable; el segundo enfoque es la capacidad exportadora, entendida como el conjunto de capacidades que le permita no solo competir con éxito en el mercado nacional sino que les sea posible hacerlo internacionalmente, como ya lo han hecho en otras regiones geográficas del país como el noroeste y el sureste de México.

#### Marco Teórico

Para la elaboración del presente artículo se consideraron conceptos detallados por los autores clásicos más relevantes en distintas teorías, como bases para entender la competitividad en el comercio entre empresas de diferentes países, siendo los más relevantes: la teoría de la ventaja absoluta (A. Smith), la ganancia global y la teoría de la ventaja comparativa (D. Ricardo), la teoría de la Deuda recíproca (S. Mill); así como las teorías y autores neoclásicos en comercio internacional como la teoría del equilibrio y el comercio internacional (Javons y Walras), la teoría de las proporciones de factores en el comercio (E. Heckscher y B. Ohlin), la teoría de los rangos de productos traslapados y la demanda representativa (S. Burnestam Linder), la teoría del ciclo del producto (R.Vernon).

Además consideramos que es muy importante para comprender la competitividad de las empresas en el plano internacional actual, incursionar en lo que se conoce como la teoría del comercio internacional estratégico bajo un enfoque sistémico, que complementa los trabajos previos y profundiza sus análisis a nivel de firma en un entorno donde cada vez se aceleran las ventanas temporales de oportunidad, dado el incremento de competidores que a la vez aceleran sus procesos para mantener o elevar su nivel competitivo, para ello se partirá de los trabajos de: competitividad de las naciones (M. Porter), las imperfecciones que presentan los mercados internacionales (P. Krugman) y la competitividad de las empresas (M. Porter). Debido a que el objetivo de esta investigación no es explicar si México es competitivo en cierta actividad como país, sino que se pretende saber es si las empresas Mexicanas (de cierta región geográfica) pueden ser competitivas o no a la luz de encontrar las variables y en qué medida la interacción de esas variables inciden en ello tomaremos como parte central del marco teórico el trabajo

de competitividad empresarial de M. Porter ya que es la persona que más ha aportado recientemente a este enfoque, entendiendo por competitividad la capacidad de una empresa de generar una ventaja competitiva que le permita generar rentabilidad y subsistir en el tiempo.

Jesús Peral hace un cruce importante del enfoque de ventaja competitiva de Porter con el de competitividad por innovación de Shumpeter en el modelo de análisis de la aparición de una ventaja competitiva destacando que para comprender si la ventaja competitiva se genera endógena o exógenamente se debe considerar el entorno nacional, el entorno de la industria en particular de que se trate y las capacidades y recursos de las empresas para encontrar que variables son las que inciden en encontrar y sostener una ventaja competitiva durante un espectro de tiempo que le permita ser lo suficientemente rentable para que sea atractivo participar en el mercado elegido (Peral, 2011). Por ello también se consideró los trabajos de la teoría del enfoque sistémico (E. Goldratt) entendiendo la empresa como parte integral de un sistema que presenta restricciones y recursos escasos para lograr sus objetivos, la teoría de los "stakeholders" o tenedores de interés (R. E. Freeman) como impulsores u opositores al éxito de un proyecto determinado por diversos actores que desean que la firma tenga éxito o fracase según sus intereses particulares. Al final cerraremos este trabajo con el método analítico de jerarquización (T. Saaty) para establecer las jerarquías entre las variables que inciden en la competitividad de las empresas en un contexto internacional.

#### El Entorno Porcícola

Acorde a cifras publicadas en el reporte "Perspectivas alimentarias, análisis de los mercados mundiales" de la FAO en el mundo se presenta un escenario deficitario de producción de alimentos, en 2010 el comercio mundial de carne de cerdo se mantuvo en el orden de los 102 millones de toneladas. **China,** fue un importador importante en 2008, ya que aunque su producción comienza a recuperarse y ha reducido su volumen de importaciones en los últimos años de todos modos será un importador de alto nivel situado por encima de las 450,000 toneladas manteniéndose junto con Japón y Rusia entre los tres países de mayor volumen de importación. Para México y el resto del mundo, el mercado asiático (China, Corea y Japón) actualmente ofrece grandes posibilidades, ya que aunque China es el productor mundial número uno del mundo según las Estadísticas alimentarias de la USDA 2009, sin embargo presenta un déficit alimentario por su alto consumo per cápita, teniendo una fuerte necesidad de importar carne de cerdo acorde a las cifras de la FAO lo que lo hace una oportunidad muy atractiva para los productores mexicanos.

#### Relevancia Social

En México, la porcicultura ocupa el tercer lugar en importancia por su aportación a la producción total de cárnicos (contrario a lo que sucede en el resto del mundo donde el consumo de puerco se encuentra en primer lugar contra el pollo, la res y otros cárnicos). La relevancia de esta actividad reside en dos cuestiones principalmente: proporciona un conjunto de productos importantes en la dieta de los mexicanos y requiere indirectamente de vastas superficies agrícolas y da lugar a una amplia y compleja cadena productiva, desde la producción de granos, la elaboración de alimentos balanceados, fármacos, biológicos veterinarios, la operación de rastros, obradores (despiezado) hasta la de industrialización de la carne (embutidos y derivados) y otros subproductos (grasas, cuero, huesos, composta y/o pezuñas).

#### Relevancia Económica

Para el 2010 el mercado global de carne fresca osciló alrededor de los 102 millones de toneladas, y presenta una tasa media de crecimiento anual de 1.9% debido al aumento de los ingresos disponibles y las preferencias cambiantes del consumidor los cuales son factores clave que están moldeando el crecimiento en el mundo de las carnes frescas. Se espera que Asia abra grandes oportunidades para obtener ganancias en este mercado. En particular las tendencias naturales, orgánicas y bajas en grasa están impulsando este

sector. El constante crecimiento de la demanda del consumidor por las carnes precocinadas, y productos cárnicos de fácil preparación está reforzando la demanda por carnes procesadas. La globalización de las tendencias, el fuerte crecimiento económico, y la recuperación de grandes mercados de las enfermedades que afectan al sector, aumentarán el comercio mundial de carne en el futuro próximo.

Esto último lo podemos inferir si analizamos las tasas de crecimiento poblacional siguiente: población mundial 2010: 6790'062,216 de habitantes con una tasa de crecimiento anual 1.17% = 79,580,822 y China: Población 1330'000,000 con una tasa de 0.6% = 7'980,000. Si se cruzan los datos demográficos (publicados en el U.S. Census Bureau International Database, disponible en: http://www.census.gov) con el consumo per cápita mundial de 14.22 kg por persona/año y el consumo per cápita de China de 33.7 kg por persona/año, se obtendrá una proyección aproximada de las necesidades de carne de cerdo para los próximos años calculándose un déficit considerable en los próximos años de 1'131,639 toneladas a nivel mundial y un déficit en el país asiático de 270,930 toneladas. Estas tendencias indican que si se aprovecha la oportunidad de un mercado de tendencia creciente y de gran tamaño, se logrará tener un impacto positivo en la economía de la región centro occidente del país (Michoacán, Jalisco y Guanajuato) ya que la porcicultura es una de las actividades económicas preponderantes de la zona, debido a que según datos de SAGARPA (2009) la producción de cerdo en pie en Michoacán, Guanajuato y Jalisco representa el 33% del total nacional.

#### La Heterogeneidad Y Complejidad De La Cadena De Valor Porcícola Mexicano

Las empresas porcícolas en México se pueden catalogar acorde a su nivel de desarrollo tecnológico en empresas tecnificadas, semi tecnificadas y no tecnificadas; esto es muy relevante ya que va de la mano el nivel de productividad y eficiencia que se puede lograr con el nivel de desarrollo tecnológico. Tal es el caso de la actividad agrícola en donde se requieren procesos de investigación y desarrollo para generar alimentos balanceados (hechos en base a granos como el sorgo, trigo, maíz) que reduzcan las enfermedades e incrementen la conversión de los animales en carne rica en nutrientes y baja en grasas. O en la actividad pecuaria, donde la producción de carne de cerdo se ve afectada por el desarrollo de las líneas genéticas del cerdo donde se controla principalmente la velocidad natural de crecimiento del cerdo y la "estampa" del animal (forma del cerdo, musculatura, color, tamaño, pezuñas, forma de orejas, entre otros) acorde a los gustos y preferencias de presentación del producto para los compradores de carne de cerdo en canal y/o en pie, o bien la proporción de carne magra y grasa que genera el animal ,en la que actualmente se ha logrado reducir esta última haciendo de la carne de cerdo un producto más sano y libre de acelerantes de crecimiento dañinos al ser humano en comparación con otros tipos de carne.

Otra cuestión tecnológica tiene que ver con las prácticas de control sanitario y de conversión de los insumos en kilogramos de carne de cerdo en pie al repartir equitativamente el alimento a toda la población de animales (sobre todo en el proceso de engorda), en donde los avances tecnológicos hacen una significativa diferencia para mantener un volumen poblacional equilibrado en cantidad de cabezas de ganado como en el ritmo de crecimiento desde la fase de "maternidad", la fase de "destete" y la de "engorda". En este tipo de empresas un colaborador relevante suele ser las empresas dedicadas a la farmacéutica veterinaria y los cuidados médicos de los animales (en los que la investigación, desarrollo e innovación de productos es la constante), las cuales suministran y aplican los productos que requieren los animales para prevenir y remediar enfermedades que pueden ser catastróficas para la actividad pecuaria si no se atienden en tiempo. En lo referente a la actividad de matanza se presentan diferencias relevantes acorde al nivel de desarrollo tecnológico en dos tipos de rastro, los rastros que cuentan con certificaciones que garantizan la higiene y cuidado en el manejo del ganado, la matanza y la limpieza de las canales de cerdo (desechando las partes del cerdo que no se pueden utilizar y/o comercializar, y que suelen ser muy pocas) y los rastros en donde no se tiene una certificación y el manejo del producto no cuenta con los estándares debidos mermando la calidad del producto y poniendo en riesgo a los consumidores finales. En las empresas enfocadas a agregar valor a través de la transformación, conocidas en el país como

En esta actividad el desarrollo tecnológico fincado en el conocimiento del equipo humano de trabajo, es realmente la base de la competitividad, ya sea por el conocimiento de fórmulas y procedimientos; la destreza que debe tener la mano de obra en los procesos de separación de la piel del cerdo (destacando que es una industria que es intensiva tanto en mano de obra como en capital), la separación de las partes cortando de diferente formas las piezas que conforman al animal o efectuando cortes específicos de dichas partes para entregarlos a los siguientes eslabones en la cadena de valor; o bien por el control que se debe de llevar para garantizar la inocuidad del producto y su vida de anaquel a través de cadenas de frío eficientes que permitan una temperatura baja y estable hasta llegar a las manos del consumidor final. También es relevante mencionar que en la competitividad de las empresas incide favorable o desfavorablemente el grado de inversión en bienes de capital que hace la firma debido a que las inversiones en maquinaria y equipo especializado como ya se mencionó son altas (para desarrollar los diferentes procesos se requiere de rampas, tinas, motores y cámaras de refrigeración, bandas y cadenas de transportación, trituradoras, cortadoras, inyectoras, embutidoras y empacadoras entre otros).

Es evidente que a mayor inversión en equipos mayor diversificación de productos y eficiencia productiva, elevando así la competitividad de las empresas mediante una oferta de valor más amplia y de mejor calidad que otros competidores. Teniendo el producto, las empresas deben hacer un esfuerzo importante por introducir sus productos en el canal tradicional de distribuidores de productos alimenticios (mayoristas y/o detallistas) o en el canal de autoservicio enfrentando fuertes barreras de introducción principalmente derivadas de "cargar" el canal en los puntos de venta con el cliente de forma eficiente y constante y los esfuerzos de promotoría en el punto de contacto con el consumidor final arropados con campañas publicitarias para ganar la preferencia con los clientes. Podemos decir que en lo referente a las cuestiones internas de las empresas se deben hacer esfuerzos importantes en cada una de las diferentes actividades que van aportando valor a los productos derivados del cerdo en términos de desarrollo genético, desarrollo medio veterinario y farmacéutico, desarrollo en control sanitario, desarrollo alimenticio, infraestructura y equipo para cría, engorda, matanza, despiece y empaque, aseguramiento de la calidad e inocuidad en la fabricación de alimentos y distribución, comercialización mediante mercadotecnia y promotoría directa, pero además deben vigilar y aprovechar un sistema entramado complejo y heterogéneo de relaciones y empresas que componen la cadena de valor porcícola conformada por elementos (empresas participantes) de diferentes niveles de desarrollo tecnológico y tamaño que ofrecen una enorme diversidad de satisfactores para otros participantes del sistema de valor y/o para el consumidor final.

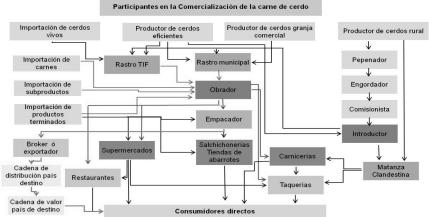


Figura 2: Participantes de la Cadena de valor internacional porcícola.

En esta figura se mapean los diferentes participantes en la cadena de valor de producción y comercialización internacional de cárnicos de cerdo Fuente elaboración propia.

Pero este sistema está inmerso y/o relacionado con más elementos : los "stakeholders" o tenedores de interés, que son todas aquellas empresas participantes, instituciones, organismos y/o personas a quien le interesa que funcione o que no funcione el sistema ya que afecta o favorece con sus resultados a sus propios intereses, sean estos económicos, políticos o sociales. Si además consideramos la comercialización de cárnicos de cerdo en el extranjero este sistema se vuelve aún más complejo ya que se debe considerar la logística, amplitud y longitud a lo largo de los canales de comercialización existentes en el mercado del país en el que se desea participar (incluyendo las barreras, ventajas y desventajas que se puedan encontrar para cumplir con sus objetivos).

Por lo tanto si se quiere analizar la competitividad de los participantes no basta contemplar las cuestiones internas de la empresa, es fundamental considerar las interacciones que existen entre los distintos participantes de la cadena de valor y los "stakeholders" relacionados con este sistema de valor para detectar a los impulsores y restrictores de la actividad. La presente investigación consideró y analizó la interacción de los "stakeholders" siguientes: Accionistas de las empresas del sector porcícola, empleados y ejecutivos clave de las empresas, clientes y/o consumidores, proveedores, competidores, organismos empresariales, instituciones académicas, instituciones de investigación e innovación, el estado y la comunidad local.

# La Competitividad De Las Empresas Porcícolas, Identificación Y Jerarquización De Variables.

Todo lo anterior presenta el reto de determinar como empresario, que variables son las más relevantes para poder incrementar la competitividad de su empresa, en donde se observa si bien es cierto un mercado interno con cierto crecimiento, también se observa un fuerte incremento en la rivalidad entre competidores que obliga a observar nuevas oportunidades en el entorno internacional. Para analizar la competitividad un sector tan heterogéneo y complejo como el de las empresas porcícolas nos enfrentamos entonces a tres retos: El primero, encontrar las variables que inciden en mayor o menor medida en la competitividad. El segundo, encontrar de esas variables cuáles son las que se consideran con mayor frecuencia en estudios de competitividad a nivel de firma o empresa. Y el tercero jerarquizarlas mediante un método que permita establecer un nivel de relevancia, pese a la heterogeneidad de los participantes en el sector, y considerando las capacidades que tienen las empresas para competir con éxito en dos arenas distintas: el mercado nacional (en el que se encuentran en la región participantes relevantes del mercado de cárnicos) y el mercado internacional (que se visualiza como una oportunidad interesante por lo ya comentado previamente).

#### Método De Identificación Por Frecuencia De Variables

Para resolver el primer reto de identificar las variables que se han estudiado en materia de competitividad se consideraron estudios de diversas instituciones, organismos y/o empresas en los que han tratado de desglosar sus componentes desde distintas perspectivas ya que determinar el grado de competitividad de una empresa no resulta fácil por ser el resultado de una interacción de elementos y procesos que además resultan cambiantes. Por ello consideramos que aplicar un enfoque sistémico que nos permita entenderlo como un conjunto de elementos que recibe ciertos insumos del entorno, los procesa y entrega como sistema, un resultado determinado (en este caso orientado a resolver una necesidad en el consumidor o usuario final) es lo más acertado. Para poder mapear las variables que inciden en la competitividad tomamos una tabla de frecuencia de variables (Bonales, 2003) en la que se tomaron esfuerzos por identificar variables de competitividad realizados por instituciones, empresas, personas y organismos entre los que se encuentran: la OCDE, el MTI, Carlos Wagner, Henry Mintzberg, la Unión Europea, el INCAE, Julio Segura, Alejandro Serralde, el INEGI, Agropecuaria Andalucía, Alfonso Cebreros, Sergio Hernández, Bancomext, Michael Porter, Miller, Alejandro Lerma, ENAP, Thomas Peters, Maidique y Patch. Con ello podemos identificar las principales variables que existen en materia de competitividad y se está en posición para enfrentar el segundo reto; para enfrentarlo se elaboró una matriz de frecuencia de variables en la que se identificó el número de menciones que cada variable obtuvo en las investigaciones y estudios mencionados en la tabla anterior.

Tabla 2: Lista de variables y su correspondiente frecuencia de mención por orden alfabético.

Administración 1, agricultura 1, alianzas internacionales 1, ambiente 1, aranceles 1, autonomía 2, benchmarking 2, calidad 10, calidad de vida 2, canales de distribución 9, capacitación 8, capital 1, clientes 3, compromiso 1, comunicación 2, consumo de energía 1, control estatal de la industria 1, corrupción gubernamental 1, costo 3, costo de capital 1, costo de vida 1, costo beneficio 1, cultura 2, desarrollo del mercado 2, desarrollo financiero 2, desempeño corporativo 1, desempleo 2, descentralización 2, deuda nacional 1, diferenciación 2, diversificación 1, educación 1, eficiencia empresarial 2, eficiencia del gobierno 1, empleo 2, enfoque 1, especialización del producto 2, estabilidad política y social 1, estrategia de mercado 1, estructura comercial 2, estructura financiera 1, estructura simplificada exportaciones 1, financiamiento 3, fuerza de la investigación 1, gastos de gobierno 2, gobierno 2, hostilidad sindical 1, imagen administrativa 2, importaciones 2, inflación 1, infraestructura 4, innovación 4, inseguridad pública 1, insumos 2, internacionalización 2, inversión extranjera 1, inversión nacional 3, investigación y desarrollo 2, liderazgo 1, mano de obra 1, marco jurídico institucional 1, mercado 2, mercado de capitales 1, mercadotecnia 1, monopolios 1, organización 3, participación de mercado 1, patentes 1, perfil del empresario 1, población 2, política fiscal 2, precio 8, preferencia de los consumidores 2, prestaciones 1, procesos productivos 2, producción 2, producción de energía 1, productividad 5, producto vendible 1, productos 3, promoción 2, pronósticos económicos 1, proteccionismo 2, proveedores 1, recursos humanos 2, recursos naturales 2, relaciones con el gobierno 1, rentabilidad 2, reserva de divisas 1, riesgo 1, salarios 2, servicios 4, tasas de interés 2, tecnología 8 y valores 2.

Para resolver el tercer reto, consistente en jerarquizar las variables más relevantes en materia de competitividad internacional, se consideraron diferentes metodologías sin embargo se eligió una que nos permitiera tener la flexibilidad suficiente para considerar distintos enfoques, dado que se decidió enfocar los puntos críticos de los diferentes participantes en la cadena de valor desde dos perspectivas o enfoques: la capacidad funcional y la capacidad exportadora (ya que puede cambiar drásticamente la relevancia de una variable si se considera participar únicamente en el mercado interno o si se desea además exportar sus productos al extranjero). Se decidió utilizar el método del Thomas L. Saaty dado que es un método simple, flexible, de fácil e intuitiva comprensión y posee una versión generalizada (el Proceso Analítico en Red - ANP) que permite tomar en cuenta posibles efectos de interdependencias, lo cual le viene muy bien a nuestra investigación y cuya metodología se describe a continuación. Método De Jerarquización Analítica De Saaty

Se trata de un procedimiento de comparación por pares de los criterios que parte de una matriz cuadrada en la cual el número de filas y columnas está definido por el número de criterios a ponderar. Así se establece una matriz de comparación entre pares de criterios, comparando la importancia de cada uno de ellos con los demás, posteriormente se establece el vector principal, el cual establece los pesos (wj) que a su vez proporciona una medida cuantitativa de la consistencia de los juicios de valor entre pares de factores (SAATY, 1980:17).

El procedimiento es el siguiente: Primero se determina la pregunta de investigación que delimita el problema estudiado y clarificar los objetivos que se persiguen con este análisis. Posteriormente se determina la importancia relativa de cada objetivo (o enfoque), y se determina la escala que servirá para evaluar a cada variable en comparación con las otras. Después se evalúa cada alternativa o variable en relación con las demás, para ello se anota en una matriz de doble entrada la calificación de la variable en cada fila, en relación a la variable de la columna correspondiente, así, es preciso primero, completar toda la matriz (Hay que repetir esta evaluación "por pares" con cada variable).

A continuación se elabora un segundo tipo de matriz de cálculo en la que se procede a pasar las calificaciones (las cuales se anotan en el ángulo inferior izquierdo de la matriz) y se introduce en el ángulo superior-derecho el número recíproco del valor de la celda correspondiente al ángulo inferiorizquierdo. Teniendo completa la matriz se debe sumar cada columna para obtener un marginal de columna y se procede a generar una nueva matriz mediante la división de cada celda entre el marginal de su columna. Por último, se le da una evaluación jerárquica a cada enfoque o perspectiva y se procede a calcular la media geométrica de los pesos para cada línea y hacer un ponderado del resultado final. (Para mayor claridad se pueden apreciar los cálculos de la aplicación del método de Saaty en el anexo B del presente artículo en el apartado "Matrices" y en apartado "Relevancia global de las alternativas").

Aplicación Del Método De Jerarquización Analítica De Saaty En La Competitividad De Las Empresas Porcícolas Del Centro Occidente De México.

El primer paso fue tomar la pregunta que delimitara el problema en cuestión, la cual quedo redactada de la manera siguiente: Determinar con un enfoque sistémico ¿Cuáles son las variables que mejor definen el nivel de competitividad de las empresas porcícolas considerando su interrelación para exportar con éxito al mercado internacional dentro del marco del sistema agroalimentario?

Una vez establecida la pregunta se determinaron los objetivos a perseguir con la aplicación de este método, siendo los siguientes:

*Objetivo general:* Entender qué variables son más relevantes y cuál es su orden jerárquico para determinar la competitividad de las empresas porcicultoras de la región centro occidente al exportar sus productos.

*Objetivos secundarios*: (en los que se determinan los enfoques o perspectivas a considerar al momento de jerarquizar cada variable respecto de las demás): Considerar para este análisis de variables que inciden en la competitividad dos perspectivas: la capacidad funcional de la firma (Competitividad administrativa financiera/Competitividad del capital humano / Competitividad productiva / Competitividad comercial) y la capacidad exportadora de la firma para participar con éxito en el mercado internacional. Y se estableció la escala de evaluación quedando de la siguiente manera:

Una vez determinados los objetivos y la escala, se procedió a calificar cada una de las alternativas o variables especificadas en la matriz de jerarquización de variables elaborada con anterioridad en la que se evalúa acorde al nivel de relevancia que tiene cada variable respecto a las demás considerando para ésta primera evaluación la perspectiva de "la capacidad funcional" de la empresa. Las evaluaciones se anotaron en la matriz de doble entrada siguientes:

Calificación	Definición	Explicación
1	Igual importancia	Dos actividades contribuyen igualmente a un objetivo
3	Ligera importancia de una sobre otra	Existe evidencia y un criterio lógico para mostrar la importancia de una
		alternativa sobre otra pero no es concluyente
5	Esencial o fuerte importancia de una sobre	Existe evidencia y un criterio lógico para mostrar la importancia de una
	otra	alternativa sobre otra
7	Importancia demostrada	Existe evidencia concluyente para mostrar la importancia de una alternativa
		sobre otra
9	Importancia absoluta	La evidencia a favor de una alternativa sobre otra es el orden de afirmación más
		alto posible
2,4,6,8	Valores intermedios entre dos calificaciones	Existe compromiso en la asignación de dos valores

#### Tabla 3: Escala de evaluación

Tabla 4: Relevancia acorde a la capacidad funcional.

	Alternativa	Calif					Alternativa	Calif
Calidad Calidad	Precio Tecnología		9 3	Precio Precio			Tecnología Capacitación del capital humano	
Calidad Calidad	Capacitación del capital humano Canales de distribución y logística		1 3	Precio Precio			Canales de distribución y logística Comunicación	
Calidad	Comunicación Alternativa	Calif	1				Alternativa	Calif
Tecnología	Capacitación del capital humano		5	Capacitación humano	del	capital	Canales de distribución y logística	
Tecnología	Canales de distribución y logística		3	Capacitación humano	del	capital	Comunicación	
Tecnología	Comunicación Alternativa	Calif	1					
Canales de distribución y logística	Comunicación		1					

Se repitió nuevamente la evaluación de cada alternativa o variable respecto a las demás pero ahora bajo el segundo enfoque: "Capacidad exportadora" y se anoto en las matrices siguientes: Y se realizó la jerarquización de los enfoques para determinar con la misma escala de evaluación en qué medida la capacidad funcional es más relevante respecto de la capacidad exportadora de las empresa para ser competitivo (cabe destacar que la evaluación solo indica el nivel de relevancia respecto de la anterior, no nos indica que si se debe de preferir una sobre la otra ya que ambas son requisito para participar con éxito en el mercado internacional independientemente del país que se elija). La evaluación del nivel de relevancia de la capacidad funcional respecto a la capacidad exportadora se determinó en la matriz siguiente:

Tabla 5: Relevancia acorde a la capacidad exportadora.

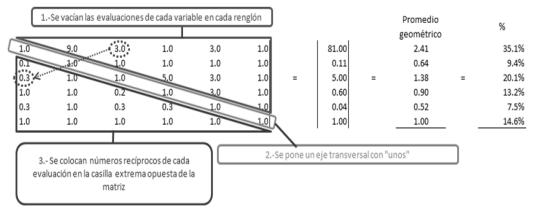
	Alternativa	Calif Alternativa							
Calidad	lidad Precio		recio 9 Precio Tecnología						
Calidad	Tecnología	5	Precio	Capacitación del capital humano	3				
Calidad	Capacitación del capital humano	5	Precio	Canales de distribución y logística	3				
Calidad	Canales de distribución y logística	3	Precio	Comunicación	2				
Calidad	Comunicación	3							
	Alternativa	Calif		Alternativa Canales de distribución	Calif v				
Tecnología	Capacitación del capital humano	5	Capacitación del capital hu		1				
Tecnología	Canales de distribución y logística	2	Capacitación del capital hu	imano Comunicación	1				
Tecnología Alternativa	Comunicación	Calif <sup>2</sup>							
Canales de									
distribución y									
logística	Comunicación	1	l						

Tabla 6: Ponderación de objetivos.

Ponderación de Objetivos (o perspectivas):		
	Alternativa	Calif
O1 Capacidad funcional de la firma	O2 Capacidad exportadora de la firma	7

Es decir, existe evidencia concluyente para afirmar que la relevancia de la capacidad funcional es mayor que la relevancia de la capacidad exportadora, lo cual no indica que una substituya o elimine a la otra, simplemente que tiene mayor relevancia para determinar la competitividad de una empresa. Teniendo hecha la comparación por pares (tanto de las variables como de las perspectivas) se procedió a elaborar las matrices de números recíprocos para calcular el promedio geométrico correspondiente.

Figura 2: Ejemplo de matriz de números recíprocos y cálculo de promedio geométrico.



En esta figura se detallan los pasos para construir una matriz de números recíprocos y se hace el cálculo de el promedio geométrico. El promedio o media geométrica de una cantidad determinada de números (n números) es la raíz n-ésima del producto de dichos números, por ejemplo si se toman los números 1, 3 y 9 su media arítmetica será la raíz cúbica de 1x3x9, es decir la raíz cúbica de 27 será el promedio aritmético el cuál es igual a 3 en este ejemplo. Fuente elaboración propia.

Para fines de nuestra investigación se calcularon tres matrices de números recíprocos y promedios geométricos para determinar la competitividad de las empresas porcícolas en China tiene un mayor peso específico la capacidad funcional o la capacidad exportadora y en qué medida, lo cual se observa a continuación:

Tabla 7: Matriz de capacidad funcional de la firma.

%		Promedio geométrico								
35.1%		2.41	81.00		1.0	3.0	1.0	3.0	9.0	1.0
9.4%		0.64	0.11		1.0	1.0	1.0	1.0	1.0	0.1
20.1%	=	1.38	5.00 =	=	1.0	3.0	5.0	1.0	1.0	0.3
13.2%		0.90	0.60		1.0	3.0	1.0	0.2	1.0	1.0
7.5%		0.52	0.04		1.0	1.0	0.3	0.3	1.0	0.3
14.6%		1.00	1.00		1.0	1.0	1.0	1.0	1.0	1.0
100%		6.85								

											%
									Promedio geométrico		%
1.0	9.0	5.0	5.0	3.0	3.0		2025.00		3.68		43.6%
0.1	1.0	3.0	3.0	3.0	2.0		6.00		1.25		14.8%
0.3	1.0	1.0	5.0	2.0	2.0	=	6.67	=	1.27	=	15.1%
1.0	1.0	0.2	1.0	1.0	1.0		0.20		0.72		8.6%
0.3	1.0	0.3	0.3	1.0	1.0		0.04		0.52		6.1%
1.0	1.0	1.0	1.0	1.0	1.0		1.00		1.00		11.8%
									8.44		100%

Tabla 8: Matriz de capacidad exportadora de la firma

Tabla 8: Matriz de relevancia de los objetivos.

Promedio geométrico									
1	7		7		2.6		87.5%		
0.1	1	=	0.142857143	=	0.4	=	12.5%		
					3.0		100%		

Con las matrices del cálculo de promedios geométricos se elabora la matriz de relevancia global de las alternativas (varaibles), la cual nos permite cruzar los dos enfoques que se utilizaros (el de la "capacidad funcional" y el de la "capacidad exportadora" de las empresas) para determinar de manera global el grado de relevancia de cada variable considerando el peso específico que tiene un enfoque sobre otro, pero respetando la ponderación que se le dio a cada variable respecto a las demás. La matriz final quedó conformada de la siguiente manera:

Tabla 9: Matriz de resultados: Relevancia global de las variables.

35.1%	43.6%				36.20%	A1	Calidad
9.4%	14.8%				10.07%	A2	Precio
20.1%	15.1%		87.50%		19.50%	A3	Tecnología
13.2%	8.6%	Х		=	12.60%	A4	Capacitación del capital humano
7.5%	6.1%		12.50%		7.37%	A5	Canales de distribución y logística
14.6%	11.8%				14.25%	A6	Comunicación
					100.00%		

#### **CONCLUSIONES**

Por lo tanto los resultados indican que considerando la frecuencia de menciones de las variables que inciden en competitividad, la capacidad funcional y la capacidad exportadora de las empresas del centro occidente de México que producen y comercializan productos cárnicos de cerdo, podemos afirmar que las variables calidad; tecnología; comunicación y vinculación con la cadena de valor; capacitación de su capital humano; precio y los canales de distribución y logística son las variables que inciden en mayor medida en la competitividad internacional de las empresas; y que acorde a la interrelación de dichas variables, el nivel de relevancia para incidir en la competitividad está determinado, a través del método de jerarquización analítica en red, en ese mismo orden.

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# EL LIDERAZGO: ¿UN CONCEPTO DE COYUNTURA O UN NUEVO PILAR PARA LAS ORGANIZACIONES?

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#### RESUMEN

En los últimos años se ha observado un aumento significativo en el número de publicaciones que refieren la temática: 'liderazgo en la empresa', incluso muchas de ellas lo asimilan al concepto de gerencia, lo que se traduce en que la noción de autoridad, como mecanismo formal de influencia, pareciera estar en retirada. Sin embargo, la evidencia disponible no permite sostener que este conjunto de estudios hayan redundado en avances significativos (de orden cualitativo) en torno a la temática; más bien puede interpretarse como una tendencia a simplificar y operacionalizar el concepto, de manera que las empresas los asimilen principalmente como una competencia a desarrollar o fortalecer, entendiendo que a partir de él es posible crear valor y propiciar el desarrollo de quienes lo practiquen. En este contexto, surgen interrogantes que llevan a sostener que las empresas, en tanto su organización, desafíos y nuevos paradigmas, se han hecho parte de escenarios dónde se vuelve una necesidad creer más en los empleados, dónde se les considera un recurso crítico para competir; a lo que debe añadirse que la configuración del mercado del trabajo se ha modificado, principalmente desde la perspectiva de composición y acceso; las estructuras consideran menos niveles jerárquicos y ha aumentado la descentralización. En síntesis, son diversos los elementos que inducen a mirar el liderazgo como una suerte de llave maestra, la que contribuiría a resolver, entre otras, las problemáticas de competitividad y viabilidad que las empresas enfrentan a diario. El liderazgo no es más importante ahora que antes, pero al cambiar la condición de realidad que enfrentan las empresas, parece ser que éste se ha vuelto la tabla de salvación de la gestión empresarial.

PALABRAS CLAVE: organización, gerencia, liderazgo.

# LEADERSHIP: A KEY CONCEPT OR A NEW FOUNDATION FOR ORGANIZATIONS

#### SUMMARY

In recent years there has been a significant increase in the number of publications related to the theme: "Leadership in the Company", even many of them assimilate this term with the management concept. It appears to be that the notion of authority, as a formal mechanism of influence seems to be in retreat. However, the available evidence does not give room to argue that this set of studies had resulted in significant progress – qualitatively speaking – on the subject. It can be interpreted as a tendency to simplify and make the concept operational, so that companies assimilate it mainly as a competency to be developed or strengthened, knowing that from this concept it is possible to create value and foster the development of those who practice it. Within this context, some questions arise that tend to lead these firms to argue in relation to its organization, new challenges and paradigms. Firms have become part of scenarios where it becomes a necessity to believe more in their employees, where they are considered a critical resource to complete. It should also be considered that the configuration of the labor market has changed, mainly from the composition and access perspective; structures considered less hierarchical levels and increased decentralization. In short, there are different elements that lead to look at leadership as a kind of skeleton key that would help to resolve – among others – the issues of competitiveness and viability that businesses face daily among other issues. Leadership is not more important now than before, but since the condition of reality has changed for companies, it seems to be that this concept has become the last resource for the business management.

#### JEL CLASSIFICATION: M00

#### KEYWORDS: Organization, management, leadership

#### Las Organizaciones

Suele aceptarse que las organizaciones son grupos de personas que articulan esfuerzos para alcanzar objetivos o propósitos que les son comunes, de hecho, en español, el concepto- organización- se define como la "*asociación de personas regulada por un conjunto de normas en función de determinados fines*" (www.rae.es). A lo largo de los años y acompañado por importantes cambios en la concepción y consideración de elementos disciplinarios, diversos autores han abordado la temática organizacional. Así por ejemplo, Etkin (2000) postula que el concepto se concibe a la luz de dos enfoques posibles: lo normativo y lo descriptivo; siendo el primero el que entiende a la organización desde el deber ser, es decir, en cuanto a lo que se espera de ella y a lo que haya sido predeterminado.

El segundo enfoque versa sobre el ser propiamente tal, o sea, apunta al entendimiento de ellas desde lo evidente, a partir lo que es observable. Esta distinción es importante, sobre todo cuando estudiamos las Organizaciones usando para ello, el parámetro de la teoría, lo cual indefectiblemente nos provocará disonancia, por la distancia existente entre realidad y teoría. En palabras de Hall (1983) las organizaciones son "una colectividad con unos límites relativamente identificables, un orden normativo, rangos de autoridad, sistemas de comunicación y sistemas de pertenencia coordinados; esta colectividad existe de manera relativamente continua en un medio y se embarca en actividades que están relacionadas, por lo general, con un conjunto de objetivos". La orientación de Hall recoge los elementos proporcionados por importantes teóricos de la administración, tal es el caso de Simon(1979) quien destaca aspectos como: las comunicaciones, las relaciones (o interrelaciones entre personas, la necesidad del colectivo), la información, los objetivos y las acciones (lo dinámico, lo mutable). Antes, Waldo (1961) refirió el concepto sobre la base de sostener que "la organización puede ser definida como la estructura de las interrelaciones personales autoritarias y habituales de un sistema administrativo...", en definitiva, es dable sostener que las organizaciones son, finalmente, un colectivo creado para conseguir un resultado (o satisfacer una expectativa que individualmente no es posible alcanzar), capaces de dinamizar en la medida que en su interior se generen relaciones de influencia y acciones derivadas de las decisiones que adopta a partir de la información disponible.

Las organizaciones no son una construcción moderna, en estricto sentido, la administración tampoco lo es. Junto con la emergencia de las primeras civilizaciones y por tanto, con la necesidad de estructurar relaciones colectivas, surgieron éstas, con características, fines y naturaleza, que en la práctica no resultan ser demasiado distantes de los que tenemos hoy.La decisión de formar comunidades fue, posiblemente, la primera decisión organizativa adoptada; y a partir de ella, se desarrollaron la serie de acciones que desencadenaron en la formalización de los estudios disciplinarios que hoy conocemos y que se imparten en miles de escuelas de administración y negocios surgidas a lo largo y ancho del mundo, desde la creación de el *Aula do Comercio* de Lisboa, en el siglo XVIII.

La esencia de la complejidad organizacional o paradigma de la complejidad, tal cual postula Etkin (2005) radica, fundamentalmente, en que su unidad básica de análisis son las personas, y por tanto, lo complejo deriva del entramado de relaciones que entre ellas se generan, fenómeno que a su vez es impulsado por una serie de elementos del entorno, los que introducen mayores grados de incertidumbre. La complejidad de la organización que conduce a la creación de incertidumbre, se manifiesta entre otras razones, porque transfiere al sistema organizacional desafíos, exigencias y problemáticas que provocan su desequilibrio

haciendo que ésta desarrolle una serie de acciones tendientes a normalizar el sistema, asegurando su viabilidad., algo parecido a lo denominado homeostasis dinámica (Katz y Kahn,1979); en el mismo sentido, una organización puede verse afectada escasamente de los vaivenes de su medioambiente en el que existe, o simplemente colapsar, si su equilibrio es precario.

Parece ser que lo complejo es atractivo, quizá porque ofrece a la disciplina administrativa un fecundo espacio para el desarrollo de tesis y postulados, sin embargo, la complejidad no es un fenómeno moderno, tampoco es patrimonialmente organizativo, es en esencia, el resultado de las relaciones que generan las personas, dado un entorno o situación específica y condicionado por las capacidades de cada uno de ellos para reconocer, capturar y procesar los estímulos que ofrece el ambiente. Cabe precisar que el ambiente no es necesariamente más desarrollado que el que conocieron las generaciones anteriores, probablemente antes y ahora el común denominador es la incertidumbre y la variabilidad; sin embargo, no es posible omitir el hecho fundamental que hoy disponemos de un mayor volumen de medios para canalizar información y para acceder a ella. En otras palabras, la diferencia no radica en la disponibilidad, sino en la capacidad de reconocerla e internalizarla.

En términos más concretos, las organizaciones han sido tratadas en un primer lugar, en la teoría, principalmente bajo una concepción de sistema cerrado, lo que originó un enfoque claramente mecanicista con claras similitudes con las máquinas, sobresaliendo el concepto de burocracia de Weber, "hizo notar que la burocracia rutiniza los procesos de administración exactamente como la mecanización rutiniza la producción" (Morgan, 1990) Y en segundo lugar, la organización como sistema abierto, concepto que en gran medida, es el que prevalece en la actualidad. Ello ha permitido explicar la capacidad adaptativa de las organizaciones a su medio ambiente, su desarrollo, efectividad y supervivencia.Aún cuando, se afirma que los enfoques mecanicistas se encuentran en retirada, la realidad muestra que siguen vigentes, quizás no con la relevancia de las primeras décadas del siglo XX, pero en muchos casos demostrando productividad, lo cual, nos debe hacer pensar, que estos enfoques en cierta medida han ido adaptándose a los tiempos, tal es el caso del concepto de burocracia profesional, acuñado por Mintzberg, que ha evolucionado hacia una mayor descentralización y autonomía de sus empleados entre otros aspectos.(Morgan,1990)

#### ¿En Que Ha Cambiado La Organización?

El fenómeno de la globalización ha provocado una serie de transformaciones tanto en lo económico, social, cultural, demográfico, tecnológico y político, los que han repercutido en la forma de resolver más eficientemente los problemas y las demandas a las organizaciones. En este sentido, la variabilidad y complejidad de los ambientes, aún cuando siempre han existido, condicionaron a las organizaciones a introducir modificaciones tanto estructurales como funcionales, las cuales, tienen un significativo impacto en los empleados.La estabilidad laboral ha dado paso a la inestabilidad, lo que ha generado el manejo de políticas que faciliten la movilidad laboral, agregando a ello el aumento significativo de los niveles de educación de la población y en consecuencia de los empleados, que sumado al crecimiento del sector terciario de las economías, ha ido generando un empleado diferente, más profesional, flexible, adaptativo y con tendencia a la polivalencia.Por otra parte, el aumento de los tamaños de los mercados ha facilitado que las organizaciones no sólo tienen mayores oportunidades para colocar productos si no que también se ha potenciado la competencia, la que conlleva a un manejo mas estricto de los costos y a una mayor descentralización, concientes que los mercados y clientes requieren de servicios de mayor calidad y en menor tiempo. Todo lo anterior nos indica, que en cierta forma, las organizaciones han empezado a creer en sus empleados como una verdadera fuente de ventaja competitiva. De ello dan fe la teoría de recursos y capacidades, el enfoque de competencias, la gestión del conocimiento, y conceptos como capital relacional y manejo de redes sociales.

#### Gerencia Y Liderazgo

Las organizaciones entendidas como sistemas sociales abiertos, se distinguen de otros sistemas por el accionar de sus componentes humanos en interrelación, pero direccionada por objetivos. De aquí se desprende la necesidad de que las organizaciones, deban velar para que este accionar, otorgue confiabilidad en que se realice el trabajo esperado de conformidad a los objetivos. Tal como lo expresaron Katz y Kahn (1979) las organizaciones deben preocuparse de reducir la variabilidad, inestabilidad y espontaneidad de los actos humanos individuales, de esta forma, en las organizaciones aparece lo que se denomina la jerarquía de la autoridad, al respecto Johansen (2002) explica que las organizaciones para convertirse en un sistema ordenado, evitando el caos y la destrucción, deberán conducirse como un sistema predecible, lo que significa mantener su complejidad bajo control.

Dicho lo anterior, la autoridad "es la que proporciona a la organización su estructura formal, distinguiendo el comportamiento de los empleados como miembros de organizaciones, de su comportamiento fuera de las mismas". (Simon, 1979). De esta forma, se está asimilando autoridad con cargo o posición lo que comúnmente viene en llamarse "autoridad formal" la que será aprovechada por la persona mientras ocupe el cargo o posición. Sin embargo, es menester mencionar, que la autoridad tiene dos caras, la ya nombrada "formal" y la "informal", que se relaciona con el énfasis que imprime la persona que detenta la autoridad "formal", es decir, generar confianza, credibilidad y respeto, estamos hablando que la legitimidad de la "autoridad formal" se logra mediante la "autoridad informal".Lo importante de la distinción anterior, es que la "autoridad formal" requiere legitimación, sobre todo, que quienes desempeñan los cargos de autoridad, están sujetos a temporalidad, rotan con cierta facilidad, lo que involucra la obtención de resultados en forma apresurada, de esta forma, la legitimidad tiende a facilitar que la persona ocupante del cargo sea aceptado y por consecuencia, su personal, tenderá a ser más diligente y proclive a esforzarse en el cumplimiento de sus deberes.

Demás está decir que cuando nos referimos a la autoridad, estamos mencionando a los gerentes dentro de las organizaciones, que son los que se distinguen generalmente por ejercer la autoridad esforzándose, unos más otros menos por otorgar a la organización de la estabilidad y equilibrio necesario, pues es en este contexto, donde las organizaciones son capaces de crecer, desarrollarse y ser viables en el tiempo, "el ejercicio de poder basado en la autoridad formal, no legitimada, está condenada a la larga al fracaso…se estaría despilfarrando el enorme potencial de los empleados".(Gil'Adí, 2004)

En las organizaciones existen líderes que no son gerentes o bien, gerentes que no tienen subordinados. No cabe dudas que estos conceptos son diferentes, pero "el grado de sobrelapamiento es un punto en torno al cual existen marcados desacuerdos" (Yukl, 1989).De acuerdo con Zaleznik (1992), los gerentes son distintos de los líderes. Los objetivos de los gerentes surgen de las necesidades por sobre los deseos, son excelentes haciendo desaparecer conflictos entre individuos, calman a las partes mientras aseguran que los negocios se realicen. En cambio los líderes adoptan actitudes personales respecto de los objetivos, buscan oportunidades y recompensas potenciales, inspiran a los subordinados e impulsan procesos creativos con su propia energía.Bennis & Nanus (1985) afirman que los gerentes son gente que hace las cosas correctamente y los líderes gente que hacen las cosas correctas.

La distinción esencial según Yukl (1990) parece ser que los líderes influyen en el compromiso, mientras los gerentes simplemente cumplen con responsabilidades de sus posiciones y ejercen autoridad.Una adecuada diferenciación entre estos dos conceptos se encuentra en Davis (1967) cuando establece que "el liderazgo es una parte de la gerencia, pero no es toda ella... el liderazgo es la habilidad de convencer a otros para que busquen con entusiasmo el logro de objetivos definidos. Es el factor humano el que une a un grupo y lo motiva hacia los objetivos. Las actividades de la gerencia como la planificación, la organización y la toma de decisiones no son efectivas hasta que el líder estimula el poder de la motivación en las personas y las dirige hacia los objetivos".

Sin entrar a discutir si los conceptos de liderazgo son distintos a los de gerencia o son sinónimos, lo que interesa es precisar que hoy las organizaciones necesitan perfilarse en forma efectiva, en la resolución de los impactos de la globalización, incluyendo el mercado, la tecnología, la información, las formas de gestionar empleados mucho más capacitados que antes-flexibles, asertivos, creativos y con necesidades más complejas- esto es lo gravitante en cuanto a la labor gerencial, de suerte tal, que hoy se requieren gerentes que tengan la voluntad de ejercitar la autoridad y también el liderazgo, pues debemos reconocer, que en contextos o situaciones de normalidad se torna difícil aplicar el liderazgo, ello facilita más el uso de la autoridad. Como contrapartida, el uso del liderazgo se relaciona con la creatividad, transformación y cambios, por tanto, este proceso genera inestabilidad y ansiedad en los empleados, pero, al igual que el uso de la autoridad formal, este será un ejercicio en un tiempo limitado, los empleados no son líderes todo el tiempo, asumen el compromiso de acuerdo a la oportunidad y voluntad, el liderazgo no es un cargo.

#### **Consideraciones Finales**

En resumen, lo que he intentado explicar es que el concepto de liderazgo no es una moda, pero tampoco es un factor nuevo mediante el cual se pueda sustentar hoy en día la organización, me da la impresión que no hemos hecho el suficiente esfuerzo de reflexionar adecuadamente sobre la importancia del concepto de autoridad y asociarlo al liderazgo. Parece ser mas fácil recurrir al liderazgo como un factor que logra adhesiones y compromiso de los empleados y por tanto, distanciarlo de la autoridad pensando que ésta sólo garantiza adhesiones en términos ya pactados de antemano, derechos y sanciones, pero esto refiere a la autoridad formal y ¿qué hay de la autoridad informal?. Ella es la que permite generar credibilidad, pasión y confianza de parte de los subordinados hacia quien detenta la autoridad formal.

El liderazgo se relaciona con las transformaciones, innovaciones y los cambios, esto es, la incertidumbre que enfrentan las organizaciones en forma recurrente, lo que obliga a actuar a quien está ejerciendo el rol de líder sin mucha información o experiencia anterior, para lo cual, usando la autoridad informal, involucrará a otros en el proceso, los convencerá, para caminar juntos en el proceso que disminuirá la tensión y torne en equilibrio la situación enfrentada. Una vez que la situación se ha resuelto, es decir ha bajado la tensión y la ansiedad, se hace necesario administrar un contexto estable, dado que los seres humanos no soportamos por mucho tiempo los estados de desequilibrio, esto significa volver al uso de la autoridad. El liderazgo y la autoridad son temporales y por tanto dependen de la mayor o menor estabilidad de las situaciones que enfrenten las organizaciones, ambos son necesarios, no olvidando la importancia de la autoridad en lo relativo a mantener el equilibrio del sistema social.

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# DUALIDAD EN EL CRECIMIENTO ECONOMICO DE CHINA

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#### RESUMEN

En este trabajo de investigación analizo el papel que juegan los índices de contaminación de la República Popular de China, y su política económica-social, visto en varias perspectivas de análisis comercial, los problemas y desafíos que se enfrenta este país con más de1340 millones de habitantes y el 21% de la población mundial además de ser referente comercial para nuestro país, México. El análisis se basa en los informes redactados por el propio gobierno chino y en documentos y datos oficiales pertenecientes a Naciones Unidas.

**JEL** A:13, D:60, F:18, N:35

PALABRAS CLAVE: Contaminación, pobreza, comercio exterior, política comercial

# **DUALITY IN CHINA ECONOMIC GROWTH**

# ABSTRACT

In this research analyzed the role of the pollution of the People's Republic of China, and its economic and social policy, seen in several commercial analytical perspectives, issues and challenges facing this country with more de1340 million inhabitants and 21% of the world population as well as being commercial reference to our country. The analysis is based on reports made by the Chinese government itself and in documents and data pertaining to United Nations officials. In this research analyzed the role of the pollution of the People's Republic of China, and its economic and social policy, seen in several commercial analytical perspectives, issues and challenges facing this country with more de1340 million inhabitants and 21% of the pollution of the People's Republic of China, and its economic and social policy, seen in several commercial analytical perspectives, issues and challenges facing this country with more de1340 million inhabitants and 21% of the world population as well as being commercial reference to our country. The analysis is based on reports made by the Chinese government itself and in documents and data pertaining to United Nations officials.

**JEL** A:13, D:60, F:18, N:35

**KEYWORDS**: Pollution, poverty, trade, trade policy

#### INTRODUCCIÓN

Un pueblo que aún carece de los productos de primera necesidad esta disfrutando de relativa productividad, el sistema "socialista" también contamina. La pobreza y desigualdad en China es acompañada con altos índices de contaminación esto se debe a que no hay una política de crecimiento equitativo entre zonas rurales y urbanas, según las estadísticas más recientes del Ministerio Chino de construcción han aumentado la demanda de vivienda a pesar de la sobrepoblación con la que cuentan, sin embargo los nuevos conceptos como la vivienda ecológica han sido aceptados por los consumidores de manera muy lenta a lo esperado (Sr. YNG Shen Presidente de la Asociación de Bienes Inmuebles de China prevé para décadas futuras que la superficie de vivienda por familia en las ciudades y poblados llegará entre 90 y 120 metros cuadrados per cápita). (Shen, 2003).

El crecimiento que ha tenido China ha traído una reducción de la pobreza en los últimos 25 años, mismos en se han incrementado sus contaminantes emitidos al mundo global (Jiang Fan,). Esto se debe a la sobrepoblación que tiene dicho país, y problemas de salud al nacer, quien a pesar de tener políticas rígidas en cuanto al control de su población -política del hijo único, que indica que cada familia solo puede tener un hijo, las mujeres son obligadas a abortar (principalmente si el producto es de sexo femenino) si es que ya tienen un hijo aunado al cobro de grandes multas violando el derecho de las mujeres, a decidir sobre su maternidad- independientemente de la firma el protocolo para eliminación de todas las formas de discriminación.

A pesar de sus altos índices poblacionales las actitudes sociales, prácticas y creencias religiosas para excluir a las mujeres suelen ser comunes y arraigadas a normas culturales y de estatus, tal parece que China en el nuevo milenio sigue contaminada de ideas retrógradas como en México y en algunas zonas de América Latina, en materia de equidad de género, debido a que en este país si bien existen mujeres trabajando en la directiva de una empresa son muy pocas el número de empresarias, solo hay que analizar los directorios empresariales por lo que su desigualdad social no le ha permitido tener prácticas justas en laboral y materia ambiental (Soto, 2012).

Sin embargo, de ser un país con altos índices económicos y comerciales, que hoy nos asombran, existe un estancamiento social, donde sus usos y costumbres pertenecen a las tradiciones de los siglos pasados, sin percatarse del daño ecológico que generan al planeta al enviar productos con baja calidad.

Este fenómeno hace que la población china emigre a otras partes del mundo para tener libertad en sus decisiones. Como puede observarse existen graves deficiencias en materia de derechos civiles, "Lo malo de ser hijo único, algo que ocurre en toda China-explica un alumno de secundaria-, es que todo gira alrededor de las calificaciones. Si no sacas buenas notas, no eres buen chico" (Bennett 2004), sin embargo a pesar de este fenómeno la demanda de bienes materiales comida, vestido, alimento y demás producción macroeconómica va en aumento, debido a la sobrepoblación que sufre China, aunado a esto crecen los índices de contaminantes.

En los setenta las campañas de concientización emprendidas por el gobierno Chino redujeron la tasa de fertilidad de 5.9 a 2.9 niños por familia, sin embargo los problemas de sobreproducción para la década de los ochenta y noventa aun prevalecían de forma constante hoy en día con más de 300 millones de habitantes se sigue padeciendo una relación crítica entre población y sobre explotación de recursos no solo los demandantes en su territorio sino los que proceden de otras latitudes del planeta, situación ya planteada desde el punto de vista económico bajo la óptica Malthusiana. (Soto, 2012).

Tan solo entre 1990 y 2009 se multiplico el uso de la energía petrolera, 189% en el uso de gas natural, 375% en el consumo de electricidad. China presenta en el 2009, 4 millones de toneladas con residuo de cromo y demás químicos contaminantes, como el monóxido de carbono, que se emiten diariamente en su producción. (Fan, 2009).

Las recientes políticas del gobierno Central de China han disminuido los índices de pobreza solo en áreas urbanas, estas han incrementado exponencialmente los índices de contaminantes, mientras que en las zonas marginas dicha contaminación se convierte en alta vulnerabilidad a través de los desastres naturales o por la contaminación misma que ha generado el crecimiento económico acelerado, por ejemplo la región de Jiangxi rica en recursos naturales como el cobre, tungsteno, oro, minas de hierro y carbón, además plata, uranio, su extracción esta cerca de los sembradíos de arroz, te negro que son vendidos y distribuidos al mundo, lo mismo sucede en la provincia de Henan una de las más pobladas con un crecimiento del 10% anual dada la apertura al exterior produce carbón, aluminio, oro y vidrio además del sector textil, metalúrgico y *alimentario*, nos encontramos con una mezcla de sectores y por lo tanto de contaminantes. (Xinhua, 2011).

Hay que señalar que esta parte de la población china presenta también elevados índices de pobreza y por lo tanto de condiciones insalubres y de desnutrición, ante tal panorama el gobierno Chino pretende restringir y castigar las especulaciones relacionadas con productos de primera necesidad.

La República Popular de China que es el principal comercializador de tecnología refleja su avance y supremacía económica en el comercio ilegal agrediendo las marcas y patentes así como los derechos de autoría y regalías sin embargo, si bien es cierto que el mundo capitalista ha sido victima de la contaminación que generan las actividades económicas, China ha sido catalogado por los científicos en materia ambiental como uno de los principales países contaminantes del planeta, además de ser precursor del calentamiento global la fomentar el consumismo internacional de sus productos de mala calidad a precios bajos.

Aunado a su producción nacional, en materia de comercio exterior China presenta 14 productos en la lista de mercancías con alto grado de toxicidad, entre los que se destacan juguetes para uso en infantes menores a los tres años, otros productos relacionados con el uso diario como lo son los detergentes, pilas de níquel cadmio (Agencia Ambiental; China). Caso destacado por la Administración Estatal de Protección Ambiental en China es la compañía de Fundición de Metales no ferrosos de Huixian causante de contaminación por plomo. Retomando los productos de uso diario se encuentra la marca dentífrica china EXCEL AND MR COOL prohibida por la República Dominicana, durante el 2007. (Xinhua, 2011).

El problema no es el producto en si sino sus componentes altamente contaminantes difíciles de tratar que se diluye por todo el planeta. En materia de costos ambientales estos son incalculables y poco visualizados por los países importadores entre los que destaca México con cifras deficitarias en materia comercial con China. (Soto, 2012).

Entre más producción y demanda internacional mayor es el índice de contaminantes que no solo se queda en sus aguas y territorio se diseminan por todo el planeta a través de las rutas comerciales avaladas por tratados internacionales y logística mundial. Lo mismo sucede en sus productos agrícolas de los cuales nuevamente México esta presente, no hay normas de regulación fitosanitaria y de transparencia internacional en la producción de sus alimentos que nos demuestren a los países importadores de sus productos, la calidad de sus alimentos, para lo cual es necesaria la participación activa de las autoridades de cada país importador en materia de salud para canalizar y tratar los casos de productos contaminados.

El Foco de atención esta puesto desde años atrás sin tener políticas claras y políticas actualizadas de prevención ambiental por parte de los agentes importadores quienes deberían retomar el caso sabiendo de los escasos controles de calidad y de la negligencia en materia de seguridad en la producción de mercancías.

Esto sin dejar de lado los productos falsos que incluyen a los fármacos adulterados, como es el caso del fármaco xinfu antibiótico de pobre calidad y de bajos niveles de esterilización. O el caso Zheng Xiaoyu ex Director de la Administración Estatal de Alimentos y Medicamentos (AEAM) quien obtuvo beneficios de ocho compañías farmacéuticas valorados en más de cinco millones de yuanes unos 650.000 dólares americanos a cambio de aprobar medicamentos durante su mandato en el 2006 (China Bussiness News, 2007).

Los sobornos y regalos de este funcionario eran provenientes de las compañías farmacéuticas de Hainan Kongliyuan Grup por aprobar 277 medicamentos, de las cuales 100 fueron aprobadas en el transcurso de solo un año. Sin embargo en materia de corrupción el caso no es aislado más de 30 personas están involucradas en el caso incluyendo a otros funcionarios como Cao Wenzhuang ex Director del Departamento de Registro de Medicamentos de la AEAM. (Xinhua, 2007)

En dicho caso las autoridades chinas solo han manifestado su interés en fortalecer la supervisión de sus funcionarios en materia de salud. Sin embargo queda claro las prácticas de corrupción y abuso del poder golpean también al gobierno chino.

El caso de Zheng quedo manifestado a nivel local al ser expulsado del Partido Comunista de China (PPCH), tras ser investigado por la Comisión Central de Control Disciplinario del PCCH y transferido a la Fiscalía Popular Suprema. El caso termino con la sentencia de solo 15 años de presión y la pregunta es ¿ y el daño a la sociedad internacional donde queda?????. A este sonado caso de corte internacional se le une el del Subdirector de la Administración Municipal de Alimentos y Medicamentos de Quqihar Xun Fubo, de la provincia nororiental de Heilongjiang por aprobar medicamentos falsos uno de ellos es el armillarisin A inyectable causando la muerte de 11 pacientes después de sufrir alteraciones renales, en Guangdong. (Xinhua, 2007)

Es lamentable que china un país rico en recursos laborales descuide la salud misma de sus trabajadores al permitir trabajar con altos índices de contaminación ya su sola sobrepoblación laboral ha originado un exceso en la demanda del empleo y una reducción del salario medio, situación que se ha trasladado al ámbito mundial, lo cual se ha traducido en un obstáculo para el desarrollo del resto de los países en marcados por la globalización.

Otro caso en el cual no hay que dejar de mencionar es la contaminación económica del comercio informal, el cual a permitido solo el "aliviar las presiones y reajustes en el mercado laboral de nuestro país", producto de la restructuración económica, aceleración del modelo globalizador y la competencia desleal de los mercados con los cuales México se han firmado tratados comerciales.

Las empresas mexicanas hoy en día amenazan con disminuir el mercado laboral gracias al mercado informal no solo por la violencia que vive el país, a la par las políticas económicas de los últimos gobiernos que no han podido absorber a los crecientes desempleados que entran al mercado laboral. México vive una alta rotación del trabajador poco calificado, la economía informal en nuestro país ha crecido de forma exponencial y no esta restringida a las diferentes zonas del territorio mexicano, al contario se expande a lo largo y ancho del país.

Mientras que el mercado informal, promovido por los ciudadanos chinos emigrantes en nuestro país, esta ganando terreno hasta convertirse en una fuente constante de creación de empleos en algunos casos mejor remunerados que el comercio formal, pero al margen de la ley y con un alto grado de inseguridad, insalubre, inestabilidad laboral, salarial y social (Organización Internacional del trabajo, 2011).

Situación que hace más vulnerable los derechos humanos sin dejar de lado el mercado laboral infantil, y los excesos de sobre explotación laboral en aras de aumentar los elevados índices de productividad que exige el mercado del trabajo, la interrogante es ¿el modelo de empleo informal es ya una constante o es parte de un fenómeno pasajero en el marco de la globalización y que papel juega el estado neoliberal en torno al compromiso social y laboral? Y ¿por que los gobiernos han fomentado o por lo menos tolerado el creciente fenómeno del mercado informal y la subcontratación –contratos basura ó firma en hoja en blanco?.

Los contratos basura no requieren de antigüedad, los acuerdos salariales quedan poco claros o bien están remunerados por debajo de los promedios mínimos establecidos, los pagos salariales no siempre son a tiempo al contario en algunas ocasiones con pagos rezagados por meses, horarios no específicos y nulo seguro al desempleo y lo más importante donde quedan las regulaciones en materia ambiental.

El fenómeno del comercio informal también ataca a la propia economía china y el resto del mundo puesto que un gran número de trabajadores rurales emigran a las urbes chinas en busca de mejores oportunidades de vida, sin embargo la mayoría de ellos tienen bajos niveles de educación, por lo cual en su propio país se ha fomentado la corrupción y el abaratar el mercado laboral. En sí la Republica Popular de China es un laboratorio social de lo que sucede en gran parte del mundo en términos económicos, comerciales, laborales y por que no también los sociales y ambientales, dada la penetración e impacto que tiene en el comercio mundial.

Por ejemplo dentro de los diez puntos que deben atacar las autoridades chinas y demás naciones que busquen un mundo mejor, está el aumento de precios de la canasta básica, los cuidados al sector salud están como puntos pendientes dentro de la agenda gubernamental y que decir de la corrupción gubernamental a la cual ya dedicamos varias líneas en párrafos anteriores, esto sin dejar de mencionar la brecha entre ricos y pobres ciudadanos de raza amarilla, quienes sufren por crisis en vivienda, aunado a altos costos de educación, desempleo y seguridad alimentaria además del tema que hoy nos ataña sus altos índices de contaminación ambiental exportados a todo el planeta sin asumir los correspondientes costos ambientales.

#### **REVISION LITERARIA**

El análisis se basa en los informes redactados por el Gobierno Chino y en documentos y datos oficiales pertenecientes a Naciones Unidas.

#### METODOLOGIA

El presente trabajo de investigación retomó los índices de contaminación de dos localidades representativas, China, en términos de producción y contaminación:... así como los índices de natalidad y crecimiento económico.

#### RESULTADOS

Al aumentar la población, producción y economía en China, se aumentan los índices de contaminación y devastación de los recursos naturales, controlar la población en china solo es un parte del problema ya que China no solo produce para abastecer la demanda nacional su política de comercio exterior es en base a la demanda mundial, sin dejar de lado los casos de corrupción líneas arriba mencionados.

#### CONCLUSIONES

Los países deberían tener y fomentar políticas de control de natalidad con una perspectiva no solo nacional sino global, los recursos del planeta no son solo de cada nación son parte del patrimonio de la biodiversidad del mundo, por lo tanto los gobiernos deben trabajar multidisciplinariamente en base a una red de población mundial la solución no esta en buscar más recursos o sustituirlos sino en administrar los recursos cada vez más limitados ó escasos. Solo para reflexionar en promedio una persona produce aproximadamente 200 kilogramos de basura en menos de un año si esto lo multiplicamos por la población mundial las cifras se vuelven exponenciales.

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# IMPLICACIONES ECONÓMICO-SOCIALES DEL MICROFINANCIAMIENTO PARA LOS MICRO Y PEQUEÑOS NEGOCIOS DEL SECTOR TERCIARIO DEL ESTADO DE COAHUILA

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# RESÚMEN

En la actualidad el financiamiento es uno de los principales problemas que enfrentan las micro y pequeñas empresas en el país y es de vital importancia su atención si tomamos en cuenta, que la economía mexicana al igual que la de otras partes del mundo, tiene sustentada su economía en ellas. El objetivo de la presente investigación es conocer las implicaciones y el impulso que se logra cuando los microempresarios gozan de apoyos financieros. El estudio se realizó en el sector terciario, localizados en la región sureste y el impacto reflejado en su calidad de vida. El estudio analiza 8 variables relacionadas con su trascendencia económica y social en relación con la problemática detectada en estudios anteriores; educación, vivienda, salud, ingreso, ocupación, permanencia, ahorro y desarrollo del negocio. El método de estudio abordado es el mixto, inicia como investigación documental y concluye con un estudio de campo, se aplicaron 100 encuestas a los dueños o responsables que habían gozado de un apoyo económico. El diseño de la investigación es no experimental y de corte transversal. Es decir no se manipularan de forma intencional las variables independientes, y solo se observaran los fenómenos tal y como se presentan en su contexto natural.

PALABRAS CLAVES: Microcréditos, impacto económico social, calidad de vida

# SOCIAL ECONOMIC IMPLICATIONS OF MICROFINANCE FOR MICRO AND SMALL COMERCIAL BUSSINES OF THE STATE OF COAHUILA

# ABSTRACT

Currently funding is one of the main problems faced by micro and small enterprises in the country and is vital attention if we consider that the mexican economy like other parts of the world have supported their economy therein. The objective of this research is to understand the implications and imposed that is achieved when microentrepreneurs enjoy financial support. The study was conducted in the tertiary sector, located in the southeast region and reflected the impact on their quality of life. The study examines eight variables related to its economic and social importance in relation to the problems detected in previous studies, education, housing, health, income, occupation, residence, savings levels and business development. The study method addressed is mixed as documentary research begins and ends with a field study, 100 surveys were applied to the owners or managers who had enjoyed economic support. The research design is not experimental and cross-cutting. That is not intentionally to manipulate the independent variables, and only observe phenomena as presented in its natural context. **JEL:** G, G3

**KEYWORDS:** Microcredit, social economic impact, quality of life

#### INTRODUCCIÓN

El financiamiento es uno de los principales problemas que enfrentan las Micro y pequeñas empresas en el país y es de vital importancia su atención si tomamos en cuenta que la economía mexicana al igual que la de otras partes del mundo tiene sustentada su economía en ellas. Los datos presentados por el INEGI en el 2009, indican que el 95.2% de estos establecimientos estaban catalogadas como microempresas, el 4.3% como pequeños negocios, 0.3 % medianas y solo el 0.20 % empresas grandes.

Las aportaciones al producto interno bruto de estos negocios no dejan de ser importantes, no obstante que en la última década se ha reducido su participación de 54 al 34% esta información es dada a conocer en abril del 2012 por la firma internacional de Salles, Sainz Grant-Thornton; Sus estudios indican que la falta de liquidez es uno de los problemas más fuertes que enfrenta, y que esto ha ocasionado que salgan del mercado rápidamente un 80% de ellos en un lapso menor a cinco años.

No obstante, estos negocios son una respuesta a la falta de empleo que enfrenta el país, el volumen de ocupación que generan agrupa al 57%. Por lo que sigue siendo un sector de suma participación en la economía. Para ello, las estrategias implementadas por la Secretaría de Economía en los últimos años, han puesto especial atención, través de sus diferentes programas como el Programa Nacional de Financiamiento al Microempresario (PRONAFIM), el Fondo Nacional de Apoyo para Empresas de Solidaridad (FONAES) y el Fondo de Microfinanciamiento a Mujeres Rurales (FOMMUR). Estos programas conforman una estrategia orientada a promover las iniciativas productivas de la población de bajos ingresos y están diseñados de tal forma que atienden a la población susceptible de apoyo de manera diferenciada.

EL FONAES ha ido evolucionando hacia el cobro de tasas de interés de mercado a excepción de los programas que operan bajo un esquema diferente y de aquellos apoyos que explícitamente se diseñan como no recuperables.

EL FOMMUR y el PRONAFIM, se caracterizan porque para su operación se auxilian de organismos intermediarios, apoyando proyectos mediante los cuales se busca aprovechar una alternativa de autoempleo y con una alta velocidad de recuperación de los recursos, bajos requerimientos de capital y generación rápida de ingresos.

En la actualidad las empresas que reciben un crédito o microcrédito no sobrepasan al 70%. Estas empresas aprovechan tasas de interés blandas los créditos son principalmente para capital de trabajo, y menos del 2% de los apoyos son empleados para investigación y desarrollo. Esta situación repercute en la carencia de innovaciones en sus procesos utilización de tecnologías de información pues carecen de la capacitación y herramientas necesarias, para aprovechar las políticas implementadas por las diferentes instituciones y organizaciones con las que pueden trabajar los factores señalados, que son importantes para la expansión empresarial, la internacionalización o el emprendimiento formal.

El restante 30% de las micro y pequeñas empresas que no reciben un microcrédito por su informalidad son un reto para la academia y las diferentes organizaciones públicas y privadas que estudian a las MIPYMES del país; Conocer como sobreviven y que estrategias implementar para atender este grupo de empresas que pueden generar un cambio social es el desafío a vencer.

Esta investigación está estructurada como sigue: Se desarrolla el sustento teórico; enseguida se describe el proceso metodológico para alcanzar los objetivos señalados, posteriormente se presentan los resultados de la investigación y finalmente, se presentan las conclusiones-limitaciones y futuras líneas de investigación.

#### **REVISIÓN DE LITERATURA**

Los microcréditos son pequeños préstamos que se dan a personas que no cuentan con los requisitos indispensables para que un banco le otorgue el préstamo. El microcrédito es una herramienta utilizada en los países en desarrollo para promover instalar y fortalecer nuevas iniciativas de negocio de personas carentes de recursos económicos que buscan financiamiento para un proyecto o emprendimiento los cuales necesitan que la tasa de interés sea muy baja para poder instalarse.

Se debe tomar en cuenta también que las microfinanzas son los servicios financieros hechos a personas en situación de pobreza, microempresas o clientes de bajos ingresos. Entre las definiciones de microcrédito está la desarrollada en la Conferencia Internacional sobre microcrédito en Washington, D.C, 2-4 de febrero de 1997 (Cumbre de Microcrédito 1997), que define al microcrédito como un programa de concesión de pequeños créditos a los más necesitados de entre los pobres para que éstos puedan poner en marcha pequeños negocios que generen ingresos con los que mejoren su nivel de vida y calidad de vida de sus habitantes

Otra definición de las microfinanzas (Garzón, 1996) es la intermediación financiera a nivel local, es decir, se incluye no sólo los créditos sino los ahorros, los depósitos y otros servicios financieros. Es un procedimiento basado en instituciones locales que recogen recursos y los reasignan localmente.

Las microfinanzas además, se refieren a la provisión de servicios financieros como préstamos, ahorro, seguros o transferencias a hogares con bajos ingresos. La mayoría de las instituciones del sector se han dedicado al microcrédito (Mena, 2005).

No se conoce con exactitud los origenes de las microfinanzas pero la creacion del Banco Grameen por el Dr. Muhammad Yunus en Bangladesh en 1976 marcó un hito en el desarrollo de éstas, y ha llevado a varias organizaciones a tomar este hecho como el origen del concepto de microfinanzas (FAO, 2000). Actualmente, las mcrofinanzas y por lo tanto el microcrédito, son estrategias claves para el desarrollo y combate de la pobreza, existendo evidencia que las señala como un instrumento eficaz para reducir la pobreza.

El microcrédito es la concesión de crédito productivo a microemprendedores y personas cuyo acceso a fuentes regulares es inexistente o restringido. En sus inicios se les daba preferencia a las mujeres para impulsar una mejora en las condiciones económicas y de calidad de vida de sus familias (Druschel et al, 2001).

Los microcréditos a menudo tienen un impacto negativo, llevándolo a mas deuda (Mosley y Hulme, 1998), en el estudio realizado por Morduch (2000) se encontró que éstos no llegan a los mas pobres y muchos de los beneficios pronosticados no se cumplen.

Algunos especialistas apuntaron que en la actualidad solo el 1% de los programas son financieramente viable (Morduch, 2000), sin contar problemas politicos, poca penetracion de mercado y fraudes continuos como ha ocurrido a las cajas populares en México.

# **METODOLOGÍA**

El objetivo de la presente investigación es conocer las implicaciones y el impulso que se logra cuando los microempresarios gozan de apoyo financiero. El estudio se realizó al sector terciario que es el que aporta el mayor porcentaje al PIB 60.6 % (INEGI 2008), a los negocios de la región sureste de Coahuila para conocer el impacto en su calidad y nivel de vida después de obtener un microcrédito.

El estudio analiza 8 variables relacionadas con su trascendencia económica y social en relación con la problemática detectada en estudios anteriores sobre; educación, vivienda, salud, ocupación, permanencia del negocio y desarrollo del negocio.

El método de estudio abordado es el mixto, inicia como investigación documental y concluye con estudio de campo, se aplicaron 108 cuestionarios a los dueños o responsables que habían gozado de un apoyo económico. El diseño de la investigación es no experimental y de corte transversal. Es decir no se manipulan de forma intencional las variables independientes, y solo se observan los fenómenos tal y como se presentan en su contexto natural.

Al inicio de la investigación se había programado un muestreo simple ya que se contaba con los listados de los beneficiaros del programa oportunidades del gobierno del Estado de Coahuila lo que no fue posible ya que al pasar a los domicilios las personas ya no se encontraban en esas direcciones.

Por lo tanto, se siguió la estrategia de diseño de muestra no probabilística a través del muestreo dirigido que selecciona sujetos típicos, o sea, aquello que hubieran gozado del beneficio de un microcrédito. Conscientes de que era la única forma de recopilar la información cuantitativa recurrimos a él no obstante de que no se pueda estimar con precisión el error estándar y el límite del nivel de confianza.

Diseño del instrumento. Una vez revisada la literatura y de acuerdo con el objetivo de la investigación, se procedió al diseño del instrumento de observación que mediante entrevista directa con los dueños del negocio de preferencia los propietarios se realizó el levantamiento de la información. El cuestionario consta de 10 módulos con preguntas cerradas, abiertas y de opción múltiple. Es importante señalar que el instrumento se enriqueció con la experiencia de autores como (Arias, Patlán 2008), quien realizó estudio "Las repercusiones económicas, familiar y psicológicas del micro financiamiento en Cuernavaca, México"

Para el levantamiento de la información se capacitó a tres personas, que aplicaron los cuestionarios logrando recabarse 108 de estos, los que en una primera depuración se excluyeron 10 por contener inconsistencias al cruzar la información, quedando una muestra de 98 cuestionarios efectivos. La técnica de selección fue incluyente, se aplicó indistintamente a quienes habían recibido un microcrédito o crédito y que tenían disposición de aceptar la entrevista.

En el procesamiento de la información se utilizó el Excel. Se aplicaron fundamentalmente dos tipos de criterios; uno relativo a los ponderados que se usaron para verificar los resultados y otro para conocer los hallazgos con relación a los objetivos.

El contexto de para la investigación es el Estado de Coahuila entre sus características tenemos que comparte frontera de 512 kilómetros con el estado de Texas y dos puntos de cruce fronterizo, Piedras Negras y Ciudad Acuña, con Eagle Pass y Del Río, Texas, respectivamente. Su Población total en el 2010 ((Instituto Nacional de Estadística, Geografía, e Informática), fue de 2'748,391 habitantes, 2.4% del total nacional; de los cuales el 50.0% corresponde a hombres e igual a mujeres, distribuida en 4,211 localidades. La tasa de crecimiento promedio anual de la población fue del 1.7 por ciento.

En base a la Encuesta Nacional de Ocupación y Empleo (INEGI Tercer Trimestre de 2008), Coahuila cuenta con una población ocupada de 1'057,124 personas. El 4.8% de ésta participa en el sector agrícola, el 33.7% en la actividad industrial y el 60.6% en el sector servicios.

De acuerdo con los indicadores macroeconómicos regionales y de coyuntura (INEGI 2006), Coahuila ocupa el noveno lugar en aportación al PIB Nacional con un 3.3%, por encima de estados como Sonora y Tamaulipas. Aporta más que los estados de Nayarit, Querétaro y Zacatecas juntos. Por otra parte y según

la Secretaría de Fomento Económico del Gobierno del Estado, en Coahuila se produce 1 de cada 4 vehículos y cuenta con potencial para desarrollar actividades vinculadas a la industria de las Tecnologías de Información.

Es considerada la Ateneas de México por la diversidad de instituciones educativas de nivel superior que cuenta entre ellas podemos señalar ; El Instituto Tecnológico de Saltillo, La Universidad Tecnológica así como el ITESUM Campus Saltillo, La Universidad Iberoamericana, La Universidad Agrónoma Antonio Narro y La Universidad Autónoma del Noreste y la de mayor cobertura que es la Universidad Autónoma de Coahuila la cual agrupa a más de 34,000 alumnos en los niveles medio básico, y superior.

#### RESULTADOS

Los resultados se presentan solamente para los negocios que habían gozado de algún financiamiento encontrándose que el 63% provenía del sector privado, 23% público y el 14% mixto, y que él 79% lo habían obtenido por primera vez.

Para fines de análisis se presentan los impactos en nivel de vida y para ello se presenta en la Figura 1, que refleja en cada caso el número de coincidencias en cada indicador. Particularmente se puede observar en la Tabla: 1, El nivel de estudios de los empresarios, el 27% tienen una formación a nivel de licenciatura, con formación media superior el 63 % y solamente el 10% con nivel primaria. Agrupando los datos de los dos niveles superiores tenemos una población habilitada con conocimientos y habilidades que bien pudieran emplearse formalmente la carencia de empleo buscan alternativas para obtener ingresos, esta escaces de puestos de trabajo fijos a ocacionado el aglutinamiento en el sector terciario ofreciendo servicio a la población, el autoempleo, es una de las consecuencia de las crisis economicas recurrentes a nivel internacional y que afectan a la economía nacional y local. Tambien impacta en el ensanchamiento de la economía informal que en la ultima década se ha duplicado con el establecimiento de pequeños negocios o bien changaros como se le llamo durante la administración Foxista que carecen de constitución legal.

Es importante señalar que el 81% de los microempresarios son nativos del Estado de Coahuila y el restante 19% son de otras partes de la República Méxicana en particular de Nuevo Leon, Veracruz, Tabasco y San Luis Potosí, su inmigración se debe a lo atractivo de las actividades ecomicas que se desarrollan en relación al sector automitriz, del que quisieran formar parte directamente o bien como provedores y auxiliares, otro factor de atración es la cercania con la frontera norte.

Analizando el comportamiento de los ahorradores tenemos que el 57 % de los negocios dedicarón parte de sus utilidades a preveer recursos para el futuro. Este segmento de microempresarios ahorradores, lo realizaron con miras a fortaleser su negocio, diversificarlo o bien adquirir tecnologías como herramientas de apoyo administrativo, carentes en este tipo de negocios ello de acuerdo a estudios ralizados con anterioridad sobre el uso de las TIC's.(Vásquez,Mejía 2010). El restante 43% indican que los excedentes obtenidos los dedicarón a subsistir como familia y que no pueden indicar con certeza que parte dedicarón al negocio.

La solvencia obtenida en razon de las ventas ya que reportan con los dividendos ocacionado9s por el fue para la adquisición de materiales y suministros, los que ya no recurrierón a créditos institucionales o, a proveedores esta situación se observa en el 20% de los microempresarios los que podemos ubican en una situación solvente que les permite disualizar un mejor futuro con mayor confianza en si mismos para invertir o hacer crecer su negocio en estudios afines se tiene que el 25 % de las microempresas contribuyen a la generación de nuevos productos.

Los rembolsos de los creditos adquiridos en virtud de que estamos hablando de fuente de recursos privadas y no oficial se presento de la siguiente forma, 43 personas señalaron muy pocos problemas para el reintegro el 29 no tuvieron problema alguno y 26 personas indicaron fuertes contrariedades al momento de los pagos pero sin llegar a solicitar otro crédito adicional para su liquidación.

En la Tabla: 2 se observa el comportamiento de 37 microempresas visitadas en el mes de septiembre de este año el objetivo de medir tipicamente los aspectos señalados y los hallasgos siguen la misma tendencia encontrada en la muestra analizada de 107 negocios en el 2011, la generación de empleo el desarrollo de nuevos productos y servicios y, lo mas importante déspues de haber obtenido Tabla 1: Incidencia En Aspectos Relacionados Con Nivel De Vida.

INDICADORES		Características					
Nivel de estudio de los microempresarios	Primaria	Secundaria	Bachillerato	Bachillerato Técnico	Universidad		
	0	10	8	53	27		
Nivel de ahorro después del microcrédito		0 - 500	501 - 1000	Más de 1000	No lo cuantifico		
		16	19	24	39		
Tipos de dificultades que le impidieron liquidar el microcrédito	Imprevistos	Falta de Liquidez	Por el Importe	Fracaso de Actividad	Otras deudas	No. problema	
	10	13	5	6	24	39	
Problemas al momento de rembolsar el crédito		NO 29	SI 11	POCOS 43	MUCHOS 15		
Capacidad para realizar compras sin solicitar crédito.	Ha aumentado mucho	Ha aumentado poco	Es igual	Ha bajado poco	Ha bajado mucho	No Aplica	
	8	19	11	3	4	0	
Capacidad para negociar con los bancos		Ha aumentado	Es igual	Ha disminuido	No Aplica		
		23	48	21	5		
Negociación con proveedores		Ha aumentado	Es Igual	Ha disminuido	No Aplica		
		12	63	18	4		
Confianza para el futuro en relación a su		Mucho	Un Poco	Poco	Nada		
negocio.		39	47	10	2		

Fuente: Elaboración propia 2011.

en financiamiento a travez del microcredito se observan incrementos importantes en sus ventas.

Referente a los indicadores de calidad de vida, podemos observar en la figura 3 como los empresarios afirman que mejoraron su estatus familiar y social, mejoraron aspectos de vivienda, educación y salud ocupacional.

Tabla 2: Impactos Economicos Del Microcrédito

Generación de empleos	7	19%
Incremento en ventas	14	38%
Desarrollo de nuevos productos/servicios.	9	24%
Ampliación de mercados o sucursales	6	16%
No contesto	1	3%
Total	37	100%

Fuente: Elaboración propia 2012

Indicadores	No. Personas que reportaron cambios					
Calidad de vida	Mucho	Poco	Igual	Nada		
	65	14	11	9		
Vivienda	59	13	15	10		
Educación	6	8	0	8		
Salud ocupacional	27	20	0	0		

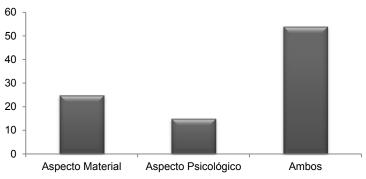
#### Tabla 3: Impacto en la calidad de vida

Fuente: Elaboración propia 2011

Analizando particularmente cada indicador tenemos que 65 entrevistados aseguran que su vida tuvo cambios importantes en calidad de vida, ya que parte de los ingresos obtenidos los dedicarón a mejoras en el negocio y como consecuencia mejorarón sus viviendas, que es donde generalmente se encuentra ubicado el negocio, otra pequeña proporción del ingreso obtenido es para financiar los gastos educativos propios y de la familia; no obstante se presentan 7 casos que le atribuyen al microcrédito, el que su vida había empeorado pues sus compromisos aumentaron y no tenian forma de liquidarlos.

A nivel general podemos observar en la Figura 1, el impacto general agrupado en tres aspectos, desde la persepción de materiales, Psicologica y Ambos

Figura 1: Aspectos generales favorecidos



Fuente: Elaboración propia 2011.

La Figura 1, refleja que 56 de los entrevistados tuvieron cambios favorables en ambos aspectos, materiales-psicologicos, no obstante hubo quienes se definierón solo por lo material 26 de ellos y 15 por lo psicológicos.

#### CONCLUSIONES

En los últimos años el cambio de paradigma de que el microcrédito era autorizado mayormente a mujeres da un giro, el 64% de ellos se otorgaron a los hombres, los que contaban con una formación profesional sólida y en un rango de edad de entre los 38 a 45 años. Edad en la que las empresas optan por separarlos de la vida laboral formal por los altos costos que les representan.

Las personas que obtuvieron un microcrédito cambiaron su mentalidad, obtuvieron seguridad económica y generaron autoempleo y en el 40% de los casos dieron ocupación a terceros o al propio cónyuge, se encontró que ambos laboraban en el negocio familiar (30 % de los casos).

El 33 % tienen proyectos para hacer crecer el negocio a través del ahorro y de constituirse formalmente para conseguir un financiamiento mayor.

Se determina que el microcrédito si influye positivamente en el ciclo de vida del negocio y en el nivel de vida de los beneficiados, la solvencia económica y la liquidez que son un problema general de los micro y pequeños negocios del sector terciario, les permite seguir trabajando el negocio, asimismo se detecta que el microcrédito incide en la cultura del ahorro pues el número de personas que lo practican se incrementó, lo que permite la madurez y longevidad de las empresas, alargar el ciclo de vida del negocio permite mejoras, diversificarlo ser competitivo y responder a las necesidades del mercado.

Es importante señalar que el origen de los microcréditos otorgados proviene en un 62% del sector privado a través de las uniones de crédito y sociedades de crédito los que se encuentran regulados y de otras fuentes, como cajas solidarias y populares las que carecen de legislación y regulación.

Por todo lo antes expuesto se hace necesario trabajar en conjunto, academia, gobiernos y microempresas para apoyar al 30 % de los negocios que nunca han podido obtener un microcrédito y que demanda atención y asesoría para poder aplicar a los apoyos financieros existentes y aprovechar las oportunidades que las diversas fuentes de financiamiento ofrecen a través de diversos programas a los emprendedores y sobre todo a los más vulnerables, a los pobres que no pueden acceder por carecer de solvencia y conocimiento.

#### Limitaciones

Al aplicar el instrumento de medición nos encontramos con una negatividad muy marcada por los entrevistados, en primer instancia pensaban que íbamos a cobrarles el microcrédito y se resistían a dar información. En segundo orden pensaban que los estaban fiscalizando. Esto lo constatamos accidentalmente cuando teníamos que regresar buscando a la persona correcta para la entrevista. No obstante de que los encuestadores portaban carta de presentación de la institución en donde se explicaba ampliamente el objetivo del cuestionario.

Al procesar la información se detectó que algunos microempresarios no contestaban algunas preguntas argumentando no tener información por lo que la base de las figuras varió al momento de graficar los datos.

#### Futuras Líneas De Investigación

Es preciso señalar que los resultados de esta investigación abren la oportunidad para trabajar en nuevas líneas de investigación, como serían la medición del impacto en aspectos de productividad, competitividad, de la toma de decisiones y de las mejoras psicológicas de los beneficiados con los microcréditos.

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# ANÁLISIS ESTRATÉGICO DE LAS INCUBADORAS DE BASE TECNOLÓGICA EN BAJA CALIFORNIA

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#### RESUMEN

El presente trabajo se realizó con el fin de identificar los factores que impactan el desarrollo y enfoque tecnológico de las incubadoras de empresas en Baja California. Mediante el producto obtenido, se pretende apoyar la creación y progreso de este sector. Para tal efecto, se realizó una investigación de tipo mixto en la que se consultaron diversas fuentes de información relacionadas con el tema. Se analizó la información obtenida mediante matrices estratégicas y se valoraron los datos a través de pruebas estadísticas. Los resultados determinan la importancia de considerar ciertos elementos internos y del entorno que prevalecen en el estado. Describiendo la falta de preferencia sobre incubadoras clasificadas en tecnología alta e intermedia.

**PALABRAS CLAVE**: Incubadoras de empresas en Baja California, análisis estratégico, base tecnológica.

#### ABSTRACT

This study was conducted to identify the factors that impact the development and technological approach to business incubators in Baja California. Using the obtained product is intended to support the creation and development of this sector. To make this possible, we conducted a mixed research were we consult from various sources of information related to the topic. The information obtained was analyzed by strategic matrices and data evaluated by statistical tests. The results indicate the importance of considering internal elements and environment prevailing in the state. Describing the lack of preference for incubators classified into high and intermediate technology.

**JEL**: M130, M190

KEYWORDS: Business Incubators in Baja California, strategic analysis, technology base.

# INTRODUCCIÓN

En la actualidad, el constante monitoreo del ambiente externo en el que se desarrolla una organización, se considera una actividad indispensable para lograr su permanencia y competitividad. Debido esto a que la información que emana de dicho proceso, permite realizar un análisis sobre los factores que ponen de manifiesto las oportunidades y amenazas existentes. Al igual, el descubrir las competencias centrales que favorecen la obtención de una ventaja diferencial y por ende la competitividad estratégica de la empresa u organización, otorga elementos para tomar decisiones que apoyen el cumplimiento de los objetivos trazados (David., 2003). El análisis referido es aplicable a todo tipo de organismo que formen parte del sistema productivo, tal es el caso de las incubadoras de empresas que son el tema central del presente trabajo. Al respecto, Elizondo (2007) menciona que las incubadoras de empresas surgieron inicialmente en Europa y Estados Unidos (en adelante EE.UU.). Durante la década de los años `50. Se identificó en EE.UU la primera incubadora de base tecnológica que fue Silicon Valley en California, con la participación de Stanford University. La Comisión Europea ha implementado también programas regionales de acciones innovadoras. En febrero del 2005 implementaron tres temas estratégicos en los que

participaron 114 de las 156 regiones que la forman. Siendo estos: agrupamiento (*clustering*), incubadoras y empresas semillas (*spin-off*). Iniciativas desarrolladas con el fin de apoyar proyectos tecnológicos y de investigación mediante nuevos servicios tecnológicos para las empresa (Politica Regional-Inforegio, 2011). México no es la excepción y ha promovido el desarrollo de incubadoras de empresas con el fin de impulsar la economía nacional, ya que el crecimiento del país ha sido insuficiente en los últimos años para combatir el rezago financiero y el impacto social que esto implica, situación que el gobierno (Poder Ejecutivo Federal, 2007) contempla en el Plan Nacional de Desarrollo (PND), el cual incluye en el Eje 2. "Economía competitiva y generadora de empleos", acciones que permitan mejorar la calidad de vida de los mexicanos mediante el impulso al crecimiento sostenido y generación de empleos formales. Para este fin se determinó la inversión en capital físico que ayude a minimizar riesgos en nuevos proyectos y facilitar la disponibilidad de recursos para su realización.

En base a lo anterior, el Poder Ejecutivo Federal (2007) describe como estrategia para potenciar la productividad y competitividad el impulsar procesos de investigación científica e innovación tecnológica, enfocado esto a la promoción de proyectos productivos de emprendedores y MIPYMES en crecimiento, consolidando así los esquemas de apoyo en una sola instancia quien se encarga de distribuir y controlar los recursos en programas como el de incubadoras de empresas. De acuerdo a lo mencionado, en México se creó un Sistema Nacional de Incubadoras de Empresa (SNIE) que depende de la Secretaria de Economía (SE), quien regula y controla el apoyo y buen funcionamiento de las incubadoras. Para poder integrarse a dicho sistema se requiere contar con un modelo de incubación reconocido, en la actualidad se tienen cinco modelos de incubación tradicional, seis de tecnología intermedia y tres de alta tecnología.

En Baja California (B.C.) existen once incubadoras registradas en el SNIE. Teniendo como marco la urgente necesidad en el estado para crear fuentes de empleo, el presente trabajo busca analizar los elementos que impactan el nivel de competitividad de las incubadoras en B.C. de acuerdo a la función para la cual fueron creadas. A la luz de algunas herramientas de planeación estratégica, se analizan elementos externos e internos que afectan el desarrollo de las incubadoras en dicha entidad, identificando la preferencia que en base al tipo de tecnología prevalece en las incubaciones. Dicho énfasis se debe al interés que demuestran los organismos de apoyo sobre este tipo de emprendimientos. Para llevar a cabo el estudio mencionado, se desarrollaron cinco fases: La primera introduce al lector en el tema, la siguiente conceptualiza las variables de estudio, la fase posterior define el método utilizado, en la cuarta se muestran los resultados y la última describe las conclusiones.

#### **REVISIÓN LITERARIA**

El análisis estratégico de cualquier organización, identifica los principales elementos que interfieren en el éxito o fracaso de una empresa u organización. Involucra también la elaboración de matrices que mediante la clasificación y asignación de valores a cada elemento identificado, destaca las puntos más importantes que se deben aprovechar o solventar (David., 2003) . El análisis externo del ambiente organizacional permite conocer aspectos importantes sobre los participantes y fuerzas externas que influyen en la capacidad para desarrollar y mantener transacciones exitosas. Al estudiar los factores del macro entorno, se analizan las fuerzas: demográficas, económicas, naturales, tecnológicas, políticas y culturales. Mientras que en el micro-ambiente, que son fuerzas que influyen en la capacidad de satisfacer a los clientes, se estudia a: proveedores, intermediarios, clientes, competencia y grupos de interés (Philip Kotle & Gary Asmstrong., 2003). Otro punto a considerar en el análisis referido es el pensamiento estratégico, el cual se encuentra asociado a la coordinación de razonamientos creativos que permite una empresa u organismo cumplir sus objetivos mediante la previsión de futuros desafíos. Las partes que forman éste son: misión, visión, valores, filosofía y estrategias de la empresa (Emprendedor.com, 2010).

Analizar la parte interna de la empresa u organización permite identificar sus fortalezas con el fin de aprovecharlas y sus debilidades para realizar los cambios pertinentes en base a una toma de decisiones

informada. Las fuerzas internas clave varían según sus áreas funcionales y para identificarlas se requiere definir las fortalezas de una empresa que la competencia no puede igualar fácilmente, siendo estas las competencias distintivas (David, 2008). Debido a que el análisis estratégico se realiza a incubadoras de empresas, es importante considerar la definición de (Muñoz & Tognato, 2006) quienes identifican la incubación de empresas como una vía para estimular el desarrollo económico de una comunidad atreves de dar soporte a proyectos de innovadores para que estos progresen.

Al definir las incubadoras de empresas (Calderón, 2006) las muestra como organizaciones que normalmente están relacionadas con las universidades y ocasionalmente al gobierno, cuya finalidad es la creación de empresas a través de la disposición de estrategias, mecanismos y en general de recursos humanos y financieros que les permita desarrollarse. Una de las clasificaciones más comunes cuando se trata de incubadoras de empresas es por el grado de tecnología. Aludiendo a esta él (Tecnológico de Monterrey, 2008) las categoriza como: Incubadoras de base tecnológica o alta tecnología a las que en su función está el apoyar la creación de empresas de sectores especializados como: Tecnologías de la información y comunicación (TIC's), microelectrónica, biotecnología, etc. Mientras que al referirse a Incubadoras de Tecnología Intermedia, se enfoca a las que otorgan apoyo a empresas con infraestructura y mecanismos de operación semi-especializados así como procesos semi-desarrollados. En cambio, describe a las Incubadoras tradicionales como sociales, con requerimientos tecnológicos básicos.

# METODOLOGÍA

Mediante una investigación de tipo mixto se realizó el presente trabajo, desarrollando primero un estudio cualitativo – exploratorio, en el cual se consultaron diversas fuentes secundarias de información. Datos que se analizaron utilizando herramientas estratégicas como lo son las matrices: PEST, EFE, EFI y FODA. El siguiente paso fue, entrevistar a tres representantes de incubadoras ubicadas en la entidad (dos de tecnología tradicional y uno de tecnología intermedia) con el fin de conocer su opinión sobre los factores considerados de mayor relevancia dentro de las matrices realizadas. Se analizaron factores que impactan al desarrollo de las incubadoras generando la Matriz Cuantitativa de la Planeación Estratégica (MCPE), mediante la cual se definieron dos estrategias

Se realizó una investigación de tipo cuantitativa, en la que se analizaron datos estadísticos generados por el Sistema Nacional de Incubadoras de Empresas con el fin de comprobar la preferencia en la zona norte de México sobre el tipo de incubadoras de base tecnológica. Las preguntas de investigación fueron: ¿Los factores del entorno impactan el desarrollo de las incubadoras en Baja California? ¿Existe preferencia sobre el tipo de incubación de base tecnológica en la zona norte de México? Por el tipo de información, la primera pregunta fue contestada mediante una investigación de tipo cualitativa y la segunda pregunta fue analizada en forma cuantitativa, formulando para ella dos hipótesis y realizándose un análisis de varianza de un factor para responderlas, siendo estas:

Hi: existe preferencia por la incubadora de base tecnológica en la región norte de México

Ho: no existe preferencia por la incubación de base tecnológica en la zona norte de México

#### RESULTADOS

Dentro del análisis PEST, al estudiar el ambiente político en México se encontró que el Gobierno de B.C. ha implementado programas de apoyo para las: Micro, Pequeñas y Medianas Empresas (MIPYME's) debido a que en el estado el 99% de las empresas son micro, pequeñas y medianas y dan empleo a 68% del personal ocupado (Fondo PYME, 2012). Estos programas otorgan financiamientos canalizados vía incubadoras de empresas y organismos de apoyo, Centros de Atención Empresarial y El Programa de Impulso al Desarrollo de Proveedores regionales del Gobierno del Estado con el fin de capacitar y brindar

asistencia técnica a fabricantes y distribuidores regionales, fortalecer la cadena productiva del sector público, generar nuevas oportunidades de negocio para las MIPYMES de B.C. y sustituir importaciones (Secretaria de Desarrollo Economico del Estado de B.C., 2011).

Otra política que apoya las actividades de las incubadoras de empresas es la del Modelo Económico para la Inversión, el Empleo y la Competitividad en B.C., la cual desarrolla este en cuatro estrategias programas anticíclicos y empleo, retención y promoción de la inversión, fomento de MIPYMES y empleo (cultura emprendedora, formalización y asistencia, acceso financiero y encadenamientos productivos), inventivos a la competitividad y la innovación (Fondo mixto B.C., estímulos a la innovación, PROSOFT, AVANCE, LFCBC y agenda de desregulación (GE de BC, 2012).

En relación al ambiente económico es pertinente señalar que el aumento sostenido de los bienes y servicios de la economía nacional afecta en forma negativa al desarrollo de un país, es por esto que se inicia por analizar la inflación en México que de acuerdo a cifras del Banco de México e INEGI, se presentan a Abril del 2012. El Índice Nacional de Precios al Consumidor (INPC) refleja como índice general un 3.41 anual (Banco de México, 2012). A la vez se puede apreciar que en B.C. se encuentran datos generados por INEGI de julio del 2010 a julio del 2011 en donde el INPC es del 3%, presentando Mexicali un 1.51% y un 2.20 Tijuana (Gobierno del Estado de Baja California, 2011).

En cuanto al desempleo, según datos publicados por INEGI (2012), del 2010-2011, B.C. ocupa el segundo lugar a nivel nacional con un porcentaje del 5.83 en el 2010 y 6.63 en el 2011, significando esto un incremento de 0.80% que ha repercutido en el ámbito económico y social del estado, factor que influye en las políticas y estrategias implementadas por el gobierno del estado para apoyar los emprendimientos que generen empleos. Al desarrollar la Matriz de Evaluación de los Factores Externos (Matriz EFE) se consideraron las cinco oportunidades y amenazas más relevantes para el éxito de las incubadoras de la entidad. Este análisis determina una puntuación ponderada total de 2.55, que se considera un valor promedio partiendo de que cuatro es el peso más alto para una organización. Situación que nos habla de la conveniencia de manejar una buena estrategia para aprovechar las oportunidades existentes y enfrentar las amenazas.

En la Matriz de evaluación de los factores internos de las incubadoras (Matriz EFI) see identificaron algunas debilidades y fortalezas al analizar la situación del sector de las incubadoras de B.C. de acuerdo al sistema que manejan, los recursos que perciben en base al tipo de tecnología que promueven y elementos competitivos que determinan su manejo interno. Situación descrita en la matriz EFI, (apreciando un puntaje ponderado de 3.11 que es más alto que el promedio, sin dejar de considerar la importancia de utilizar las fortalezas para solventar debilidades de las incubadoras. Para complementar este estudio, se analizó el pensamiento estratégico de la SE, encontrándolo enfocado al apoyo de la economía a través del fortalecimiento y creación de empresas.

En el análisis FODA se tomaron en cuenta los factores más importantes de las dos matrices anteriores analizando estos de acuerdo a estrategias para minimizar debilidades y amenazas mediante el aprovechamiento de oportunidades que potencialicen sus fortalezas. La Matriz Cuantitativa de la Planeación Estratégica, (MCPE) ver (tabla 1), concentra los análisis efectuados dentro de las matrices estratégicas: PEST, EFE, EFI y FODA.

Alternativas Estratégicas MCPE	transferencia	Alianzas con IES/ transferencia de tecnología y conocimientos		Enfoques mixtos en tipo de Incubadoras (tecnología: mayor apoyo financiero)	
Factores Clave	Pond./2	PA	РТА	PA	РТА
<b>Oportunidades</b> FC1 Programa de apoyo a incubadoras incluido en el PND FC2 Variedad de créditos a emprendedores FC3 Vinculación con centros de transferencia de IES. FC4 Variedad de proyectos, zonas fronterizas. FC5La Inversión extranjera activa la economía estatal	.07 .07 .05 .04 .05	4 3 4 .4 .3	.28 .21 .20 .16 .15	4 2 4 .3	.28 .28 .10 .16 .15
Amenazas FC1. Cambio de gobierno (políticas económicas) FC2. Población flotante en el estado (emigrantes) FC3. Inflación FC4. Gran competencia para empresas nuevas FC5. Las tasas de desempleo están subiendo	.06 .03 .03 .05 .04	4 4 3 3	.24  .12 .15 .12	3  2 3 3	.18  .06 .15 .12
<b>Fortalezas</b> FC1. Asesores especializados FC2. Recursos para adecuado funcionamiento FC3. Infraestructura y equipo FC4. Modelos reconocidos. FC5. Procesos de innovación alcanzado	.05 .06 .05 .04 .03	4 4  4	.20 .24 .20 	3 2 - 3	.15 .18. .10  .09
<b>Debilidades</b> FC1. Falta de proyectos tecnológicos. FC2. Periodos cortos de incubación FC3. Falta de plan normativo que alinee el pensamiento estratégico FC4. Falta de sistemas de transferencia Universidad-	.07 .04 .04	4  4	.28   .32	3  1	.21   .08
Incubadora Incubadora IFC5. Procesos lentos de financiamiento para incubandos	.05	3	.15 3.14	3	.15 2.26

Tabla 1: MCPE para las Incubadoras de Empresas de B.C.

La Tabla MCPE muestra la comparación entre dos estrategias que pueden considerarse para las incubadoras en Baja California, la primera estrategia denominada Alianzas con IES y la segunda estrategia utilizando Enfoques mixtos en tipo de incubadoras. Se muestra una síntesis del análisis FODA que se hizo para las incubadoras de Baja California, combinando la información que resultó del análisis PEST, EFE y EFI, resultado como estrategia con mejor ponderación la primera: Alianzas con IES. Fuente: elaboración propia

Abreviaturas utilizadas en la tabla:

FC= Factor, PA = Grado de atractivo, PTA = Puntuación total del grado de atractivo Escala sobre el grado de atractivo:

1= no atractiva, 2= poco atractiva, 3= razonablemente atractiva, 4= muy atractiva

El análisis MPEC realizado en base a estudios previos, enfoca la conveniencia de implementar una estrategia de alianza con los centros de investigación o IES. Esto con el fin de lograr que se transfiera tecnología y conocimiento a los proyectos incubados. Solventando así algunas de las debilidades de las incubadoras tradicionales y de base tecnológica y aprovechando recursos existentes en estos centros, mismos que según estudios descritos, respaldan en forma especial a las incubadoras que acogen proyectos de tecnología media y alta. Con el fin de identificar la preferencia sobre el tipo de incubadoras que existen en la zona fronteriza, se realizó una prueba estadística tomando información publicada por el Sistema Nacional de Incubadoras de Empresas. Haciendo con esto una tabla comparativa (tabla 2) y utilizando estos datos para realizar un análisis de varianza de un factor (tabla 3).

Tipo de Incubadora	Incubadoras en BC	Incubadoras en Sonora	Incubadoras en Chihuahua	Incubadoras en Coahuila	Incubadoras en Nuevo León	Incubadoras en Tamaulipas	Total
Tradicional	11	7	4	5	6	5	38
Tecnología intermedia	1	14	13	10	10	9	57
Alta tecnología	0	1	1	0	2	0	4

Tabla 2: Clasificación de incubadoras por tipo de tecnología

Se muestra cierta preferencia sobre el tipo de incubadoras de base tecnológica en la región norte de México. Ho:  $\mu 1 = \mu 2 = \mu 3 = \mu 4...6$  Hi: Diferencia de un  $\mu$  mínimo. El estado de Sonora quién registra el mayor número de éstas. Baja California tiene 11 incubadoras de tipo tradicional y sólo 1 de tecnología intermedia, no existen incubadoras de alta tecnología en éste estado. Fuente: elaboración propia con la datos de Sistema Nacional de Incubadoras de Empresas, en Fondo PYME (2012)

#### Tabla 3: Análisis de varianza de un factor.

Origen de las variaciones	Suma de cuadrados	Grados de libertad		Promedio de los cuadros	F	Probabilidad	Valor crítico para F
Entre grupos	21.1666667	noertau	5	4.2333333	0.14137291	0.97899591	3.1058752
Dentro de los	359.333333		12	29.94444444			
grupos							
Total	380.5		17				

Frecuencia = .14137 Probabilidad =.9789 >.05 se rechaza Ho y se acepta Hi Valor crítico =3.105 Fuente: elaboración propia.

De acuerdo a los resultados que arroja el análisis anterior, se muestra que en la parte norte de México, se apoya principalmente a proyectos de base tecnológica. Situación en la que Baja California no compite a pesar de tener la influencia de EE.UU y estar dentro de la zona analizada, ya que solo cuenta con una incubadora de tecnología intermedia y ninguna de alta tecnología.

#### CONCLUSIONES

El resultado de la investigación exploratoria efectuada inicio con una pesquisa en diversas fuentes secundarias. Información respaldada por fuentes primarias atreves de entrevistas a representantes de tres incubadoras de empresas en las que se analizaron y seleccionaron los elementos más relevantes ver tabla dos. Se concluye que los factores del entorno si impactan el desarrollo de las incubadoras en Baja California. Esto debido a diversas situaciones identificadas, tales como: el grado de importancia de las MIPEyME en el estado, tasas de desempleo, población flotante (emigrantes) y otros factores analizados que hacen de Baja California una región con características distintivas. Aunado esto al lento proceso de financiamiento y una gran competencia para los nuevos proyectos, se pude deducir la necesidad de innovación y competitividad para las empresas de nueva creación. Esto se vería apoyado si se incrementa el nivel de tecnología, proceso de adjudicación a esta y facilidades para su transferencia. Si estos factores no se dan, dificilmente se alcanzara un nivel similar en la preferencia de incubadoras de base tecnológica como el logrado por otros estados de la zona norte de México.

De acuerdo a lo anterior y en base a la puntuación obtenida en resultados generados por el análisis de matrices (concentrado en la Matriz Cuantitativa de la Planeación Estratégica, (MCPE) y reafirmado en entrevista a tres representantes de incubadoras ubicadas en el estado de Baja California) se cree conveniente el crear alianzas con Instituciones de Educación Superior (IES) que transfieran tecnología y conocimiento. Así como enfoques mixtos en el tipo de Incubadoras (tradicional y tecnológica) debido esto al soporte en competitividad que esto otorga a las empresas y al grado de prioridad que da el gobierno a este tipo de proyectos, lo que se traduce en apoyo financiero para ellos y solidez hacia su emprendimiento. El probar la dicha conveniencia sería objeto de un estudio subsecuente.

Se considera también de importancia dentro de este análisis, el alinear el pensamiento estratégico de la SE, con el SNIE y las Incubadoras de empresas. Esto con el fin de garantizar un proceso acorde a la razón de ser de estos organismos y vincular las estrategias en forma coordinada y funcional. Se aprecia conveniente a la vez el publicar la misión, visión, filosofía, valores y plan estratégico de la SE, con el fin de extender el compromiso a la planeación normativa de estas unidades. Según la prueba estadística efectuada, si existe preferencia por las incubadoras de base tecnológica en la región norte de México, rechazando con esto la hipótesis nula Ho y aceptando la hipótesis de investigación Hi. Más no sucede lo mismo en el estado de Baja California. Este punto, reafirma lo tratado en los párrafos anteriores sobre la importancia de considerar los factores que forman parte del entorno externo e interno de cada incubadora y del sector al que pertenece con el fin de propiciar cierta preferencia en cuanto al tipo de proyectos a emprender y el éxito de la promoción que se dé a estos.

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#### RESUMEN

El presente trabajo tiene como finalidad identificar la viabilidad de la incorporación de un programa de posgrado en la modalidad a distancia en la Universidad de Guadalajara (U de G), lo relevante es que es la primera vez que se propone el posgrado en línea realizado por la U de G. en un Centro Universitario Regional, ya que está dentro del Centro Universitario de la Costa Sur, visto desde la parte del presupuesto y sin disminuir la calidad de la educación presencial, y sí privilegiando las ventajas que se tendrán en la modalidad a distancia. La investigación sobre la mejora de la calidad en el sistema superior por medio de la propuesta de los estudios de posgrado a distancia (Maestría en Administración y Gestión Regional), así también se identificaron las principales actividades que se plasman en la propuesta y que permitirá contar con el capital humano adecuado y actualizado para esta modalidad, así como la infraestructura necesaria y los costos involucrados que deberán manejarse para poder definir colegiaturas y márgenes de operación.

Palabras clave: posgrado, educación a distancia y presupuesto

# THE POSTGRADUATE'S QUALITY AND ITS BUDGET BASED ON ECONOMIC BENEFITS

#### ABSTRACT

The purpose of the present study is to identify the viability of the incorporation of a program of postgraduate course in the e-learning modality in the University of Guadalajara (OR of G), the prominent thing is that is the first time that the postgraduate course in line carried out is proposed by the OR of G. in a Regional university, since is inside the university of the South Coast, seen from the part of the budget and without diminishing the quality of the eyewitness education, and privileging the advantages that will have in the distance modality. The investigation handle the improvement of the quality in the upper system through the proposal of the studies of postgraduate course to distance (Mastery in Administration and Regional Management), thus also the main activities were identified that are expressed in the proposal and that will permit to include the adequate human capital and brought up to date for this modality, as well as the necessary infrastructure and the costs involved that should be handled to be able Defining college scholarships and margins of operation.

KEYWORDS: Master degree, Distance education and Budgets..

# INTRODUCCIÓN

La Maestría en Administración y Gestión Regional inició sus actividades en el Centro Universitario de la Costa Sur de la Universidad de Guadalajara en agosto de 2005. No obstante las alentadoras cifras de demanda constante que han permitido al programa permanecer a lo largo de 7 años en un mercado cuya oferta educativa cada día es mayor y que ha venido atendiendo a un mercado laboral que requiere mayores habilidades, conocimientos y actitudes, así como otras competencias antes no consideradas; las tendencias del sistema educativo nacional, las necesidades del entorno y las propias perspectivas institucionales, exigen revisar y adecuar los programas de posgrado que actualmente ofrece el Centro Universitario de la Costa Sur a fin de cumplir con las características de flexibilidad, pertinencia y tutoría

que permitan responder a las necesidades socioeconómicas, además de optimizar la infraestructura física y académica del propio Centro Universitario. En este contexto, la propuesta de ofertar la Maestría en Administración y Gestión Regional en la modalidad a distancia plantea las siguientes ventajas:

- Disponibilidad de tiempos flexibles para estudiantes y profesores.
- Mayor acercamiento a estudiantes por tiempo de asesoramiento.
- Disponibilidad de un portal accesible y dedicado.
- Ahorro en los gastos de traslado.

De esta manera, el estudiante, además de contar con las bases que le permitan conocer y aplicar la Teoría General de la Administración a la solución de problemas, tiene la posibilidad de aplicarlas en su medio laboral de inmediato a fin de dominar las técnicas que la Administración propone en funciones y actividades específicas. En este sentido, el presente programa de Maestría en Administración y Gestión Regional sostiene un equilibrio entre teoría y práctica, al habilitar al estudiante para iniciar trabajos terminales de grado para la aplicación innovadora del conocimiento, lo cual estará soportado en líneas de investigación a cargo de cuerpos académicos y un programa de tutorías que acompañará el desarrollo de los estudiantes.

# **METODOLOGIA**

En esta investigación se realizo una búsqueda documental que nos ayudara a encontrar los beneficios que se obtienen teniendo un posgrado de calidad, viendo el aspecto financiero como el principal fenómeno a localizar, ya que el posgrado al cual nos referimos en esta investigación es autofinanciable y es a base de el pago de la matricula que cada semestre se lleva acabo.

# RESULTADOS

Utilizando la metodología mencionada anteriormente los encontramos dentro del Contexto internacional que en los albores de este siglo se observa una demanda de educación superior sin precedentes acompañada de una gran diversificación de la misma y una mayor toma de conciencia de la importancia fundamental que este tipo de educación reviste para el desarrollo sociocultural y económico y para la construcción del futuro, de cara al cual las nuevas generaciones deberán estar preparadas con nuevas competencias y conocimientos e ideas (Méndez, 2006). La educación superior debe hacer frente a retos que suponen las nuevas oportunidades que abren las tecnologías de información, que dan apertura a un contexto mundial de comercialización de bienes y servicios, y comprende "todo tipo de estudios de formación para la investigación en el posgrado, impartidos por una universidad u otros establecimientos que estén acreditados por las autoridades competentes del Estado como centros de enseñanza superior" (Besabe, 2007).

# Contexto nacional

El nuevo entorno de la sociedad con conocimiento de los bienes y servicios, brinda oportunidades extraordinarias para innovaciones orientadas al desarrollo de nuevas modalidades educativas adecuadas a las condiciones sociales, económicas y culturales de los distintos grupos de población, y con niveles más elevados de aprendizaje, dentro de una concepción de educación integral que abarque la formación de profesionales en el ámbito del estudio de las organizaciones. Las instituciones educativas pueden adquirir nuevas capacidades para trascender sus fronteras tradicionales. Las redes de comunicación, que se diversifican y amplían en la nueva sociedad del conocimiento permiten establecer nuevos vínculos y

fortalecer los existentes entre instituciones educativas, culturales y laborales. La evolución de la sociedad mexicana en las últimas décadas obedece a múltiples razones como el incremento demográfico, la elevación de los niveles de educación de la población, profundos cambios económicos, intereses y valores emergentes, nuevas formas de asociación y organización social, cambios tecnológicos e internacionalización (UAEM, 2009).

#### Contexto Institucional

El plan de desarrollo institucional 2030 de la U de G define los rumbos que tomará la universidad de acuerdo con la misión que tienen encomendada y conforme a los principios de calidad y humanismo propuestos como sustento en la actual administración.El plan de Desarrollo Institucional perfila a la institución como un centro generador y reproductor de conocimiento mediante la aplicación de un modelo educativo innovador enfocado en el estudiante y centrado en el aprendizaje, apoyado tanto en las mejores técnicas pedagógicas y en las tecnologías de la información y la comunicación, con las cualidades de calidad, movilidad y flexibilidad, como en el trabajo en red colaborativo y colegiado. Para ello, el Centro Universitario que posee la libertad académica, atributo que permite el debate permanente de las ideas en un espacio abierto a la creatividad y en el que se materializan el libre pensamiento y la libertad de investigación y educación.

#### Beneficios De Los Posgrados De Calidad

*La calidad*: del proceso de educación, es un concepto de múltiples diferencias por la visión, dimensión e interpretación que del mismo se realice, en particular la calidad del posgrado comprende un conjunto de estándares nacionales e internacionales, que conjugan la excelencia académica y la pertinencia social en su acepción más amplia, y que engloban un grupo de variables en las cuales se incluye desde los estudiantes, la infraestructura (aseguramiento didáctico, material y administrativo), los profesores y tutores, el currículo, hasta la pertinencia social e impacto de los programas que se desarrollen.

El concepto de calidad es complejo, en su integración todo es necesario en función de abarcar una visión global, con un enfoque sistémico que incorpore al hombre como un participante que opera sobre el sistema y evoluciona junto con él, ya que el mejoramiento continuo y la evaluación de la calidad son tareas complejas que involucran a muchos actores. (Profesores, tutores, evaluadores, estudiantes, directivos). La sociedad de este mundo globalizado ha incrementado sus exigencias a las instituciones de educación superior, no basta con que sean guardianes y trasmisoras del conocimiento universal, lo que la sociedad necesita es que ese conocimiento sea aplicable al entorno en que se desarrollan, que sea pertinente en función de satisfacer las demandas y que al aplicarse se produzca el impacto, el cambio necesario hacia el desarrollo. En particular en nuestros países subdesarrollados, además se precisa que todo el proceso sea sostenible para las condiciones en que se realiza.

Todos estos requerimientos se aglutinan como un sistema en el concepto de calidad, al cual tienen que suscribirse las universidades, como un reto a su desarrollo y una oportunidad para alcanzar la excelencia. Para fomentar la matricula de posgrado por medio de los recursos extraordinarios que otorga el CONACYT en su sistema de becas, así como ingresar al Programa Nacional de Posgrados de Calidad (PNPC) el problema latente es la ausencia de aspirantes a programas de Posgrado debido a la alta demanda de becas que estudiantes requiere, para esto se tiene un programa especifico por parte del CONACYT de Becas para Estudio de Posgrado. Algo que afecta al ingreso a continuar con los estudios a egresados de Licenciatura es el tiempo de los aspirantes, ya que en muchas ocasiones no son compatibles los horarios laborales con los de la Institución Educativa, a esto existen requisitos para poder acceder a los financiamientos que otorga el CONACYT aspirantes a beca de posgrado en el país.

Se cuenta con diferentes apoyos dependiendo el nivel de estudios al que desea ingresar, que son

El contexto internacional se mueve en inciertos escenarios de tipo económico, social, cultural, científico tecnológico, demográfico y ambiental, en medio del cual, nuestro país tiene una gran fortaleza por el estado que se ha alcanzado en la Educación Superior, con más graduados universitarios en los últimos 50 años y junto con la COMEPO - Consejo Mexicano de Estudios de Posgrado tener un sistema nacional de posgrado, que muy pocos países tienen. El sistema de educación superior dentro del nivel de posgrado en México ha alcanzado niveles que exhiben la formación de más de 1 mil doctores y más de 127 mil masters por año, en la actualidad existen más de 14000 programas diferentes según la ANUIES, una gran cantidad de los cuales tiene categorías superiores de acreditación como lo marcan los que se encuentran dentro del Padrón Nacional de Programas de Calidad.

En estos momentos, en que se deben de tomar una serie de medidas económicas para garantizar el futuro socio económico del país, la educación superior tiene que jugar un rol fundamental en la elevación de la calidad de los profesionales, la orientación de graduados universitarios hacia las áreas económicas y sociales con mayores demandas de profesionales, la mayor pertinencia e impacto de los programas de formación y superación, así como mayor eficiencia y sostenibilidad en la superación profesional y científica permanente de nuestros profesionales. Se deben desarrollar nuevas estrategias que desde la gestión de la educación a nivel posgrado que permitan una mayor respuesta a los retos actuales de la Educación Superior. Dentro de la estadística que nos muestra la Universidad Virtual de la Universidad de Guadalajara no muestra en el seguimiento escolar de nivel de maestría se observa una eficiencia terminal del 76% al corte de esta investigación y en el seguimiento escolar de nivel de Doctorado se observa una eficiencia terminal del 84% al corte de esta investigación. El director general del CONACYT dijo que de la población total del país, que según cifras del INEGI asciende a 112 millones de personas, sólo 12 millones cuentan con una licenciatura y menos de un millón han estudiado un posgrado.

# "Una proporción todavía baja de personas altamente calificadas para los desafíos del presente y el futuro de un desarrollo nacional más equitativo y sustentable."

De acuerdo con estimaciones del CONACYT, en el mejor de los casos, dijo, sólo ingresa al posgrado el 20 por ciento de los jóvenes que concluye una licenciatura. El funcionario señalo que del total de la matricula nacional de posgrado, que es **de** 178 mil estudiantes, casi el 19 por ciento cuenta con una beca del CONACYT para realizar sus estudios. En los momentos en que la humanidad ha alcanzado los 7000 millones de habitantes, el contexto internacional se mueve en inciertos escenarios de tipo económico, social, cultural, científico tecnológico, demográfico y ambiental, que en décadas anteriores no estaban presentes con la intensidad y volúmenes con que se presentan en el momento actual, "…es la realidad de este mundo: un sistema globalizado e insostenible de explotación y saqueo de todos los pueblos del mundo…" (Castro 2003, p: 1Homenaje a Martí.). Esta situación se traduce al interior de los países de la América Latina en una constante crisis económica y política, deterioro de los sistemas nacionales de salud y educación, incremento de la pobreza, las epidemias, analfabetismo, invasión cultural, etc. Como resultado de la globalización neoliberal en contubernio con los gobiernos "democráticos." Frente a los numerosos desafíos, la educación constituye un instrumento indispensable para que la humanidad pueda progresar hacia los ideales de paz, libertad y justicia social. UNESCO, 2009.

Las Instituciones de Educación Superior (IES) no deben permanecer pasivas ante estos retos, estando obligadas a formular nuevas políticas y estrategias en la formación del profesional, el postgrado, la extensión, la elevación de la calidad, que respondan a las exigencias que se derivan del contexto nacional e internacional. La Universidad debe asumir, por sobre todo, su función fundamental como productora de conocimientos, y responsabilizada con la educación a nivel posgrado; y como se encuentra ante una situación competitiva, es imprescindible en nuestros países subdesarrollados responder con mayor

calidad, pertinencia, eficiencia y sostenibilidad ante estos retos contemporáneos.

En estos momentos, en que se impone tomar una serie de medidas económicas para garantizar el futuro socio económico del país, la educación superior, tiene que jugar un rol fundamental en la elevación de la calidad de los profesionales, la orientación de graduados universitarios hacia las áreas económicas y sociales con mayores demandas de profesionales, la mayor pertinencia e impacto de los programas de formación y superación, así como mayor eficiencia y sostenibilidad en la superación profesional y científica permanente de nuestros profesionales. Se precisa entonces, diseñar y desarrollar nuevas estrategias que desde la gestión de la educación superior a nivel posgrado permitan una mayor respuesta a los retos actuales de calidad, pertinencia, eficiencia y sostenibilidad que tienen que afrontar las Instituciones de Educación Superior.

*Estrategias para incrementar la calidad en el posgrado:* Cuando se toman en consideración estrategias como guía, amplia la proyección hacia el territorio de los programas de posgrado que se desarrollan en función de alcanzar una mayor pertinencia:

1. Identificación de los problemas regionales socio económicos priorizados del territorio que se precisan solucionar.

2. Determinación de las necesidades de formación y desarrollo, tanto de los territorios como de las instituciones de educación superior, en función de la solución novedosa de los problemas identificados, con visión a corto, mediano y largo plazo.

3. Inserción de la enseñanza de posgrado (estudiantes y profesores) en los principales programas territoriales de desarrollo, vinculados al área de conocimientos que abarca el Programa de posgrado.

4. Garantizar desde el posgrado la reorientación de los profesionales de los territorios, hacia los perfiles ocupacionales con mayor demanda.

#### Gestión Y Calidad: Comparación Entre Programas De Posgrado Regulares Y Los Del CONACYT.

Actualmente existen fondos públicos para programas regulares, y programas de posgrado de financiamiento CONACYT (becas). La comparación que vamos a realizar se basa en información que publican los programas en sus Informes de Labores del 2010 realizado con indicadores de gestión del Marco de referencia para la evaluación y seguimiento de programas de posgrado del CONACYT. Se presentan las diferencias entre los programas regulares, los programas de financiamiento CONACYT y los mixtos, poniendo en evidencia los beneficios de este último tipo de gestión como modelo adecuado para poder implementar en el Centro Universitario de la Costa Sur en la Maestría en Administración y Gestión Regional. La COMEPO constituido por programas de maestría y Doctorado, crece y se consolida en el contexto de las unidades académicas base y colaboradoras, produciendo aún más presión sobre los fondos federales y estatales para fortalecer el financiamiento y se dio su crecimiento por la crisis económica mundial. Actualmente se toma conciencia de que el posgrado en la Universidad de Guadalajara no puede crecer al ritmo que el país requiere, ni a la velocidad y con la calidad que la generación de nuevos profesores desean para consolidar la investigación.

La Universidad de Guadalajara comienza a visualizar que la única forma de responder al país, con las opciones de posgrado que éste demanda, es a través de ser recibidos en línea y de mecanismos alternos de generación de fondos por su naturaleza que requiere autofinanciamiento. La posibilidad de crear programas con fuentes de financiamiento federal motivo a la creación de maestrías profesionales.

Nacen así distinciones entre los mecanismos de financiamiento para los programas de posgrado. Los

programas tradicionales con financiamiento estatal y recursos propios son denominados *regulares*. Los programas nuevos, con fuentes de financiamiento federal por medio del CONACYT.

#### Programas De Posgrado De Financiamiento CONACYT

Los programas de posgrado con financiamiento por medio de las becas del CONACYT perciben un pago mensual distinto respecto de los programas regulares, o reciben fondos externos provenientes de instituciones u organismos nacionales o internacionales, públicos o privados. Estos fondos no ingresan a la cuenta única de la Universidad, sino que son administrados por los programas individualmente para garantizar su sostenibilidad. La Universidad de Guadalajara les aporta además, en mayor o menor grado, recursos adicionales de diversa índole (recursos humanos, infraestructura, gastos fijos, etc.), para facilitar su funcionamiento. Los programas de posgrado con financiamiento CONACYT tienen una especial forma de gestión, derivada de su financiamiento. Un estudiante de estos programas podría tener que pagar el doble o hasta 3.5 veces lo que pagaría en un programa de posgrado regular, con un mínimo y máximo costo del crédito normado por el Consejo General Universitario. Además de cubrir los costos operativos propios de sus programas de posgrado, éstos están llamados por la normativa establecida para su funcionamiento por el Consejo General Universitario a proporcionar una fuente de apoyo económico como un todo. Con la figura de programas de financiamiento CONACYT, la Universidad delega en sus programas de posgrado la responsabilidad de generar los fondos para su sostenibilidad.

La oferta de programas regulares es aproximadamente solo el 80% de la oferta académica de posgrados en la actualidad modalidad de autofinanciables. Tanto es así que muchas veces se tiende a confundir, en el contexto universitario, los términos de grado profesional con la fuente de financiamiento CONACYT, lo cual no es del todo cierto. Es importante aclarar que existen posgrados de financiamiento CONACYT de alta demanda, lo cual permite que dichos programas puedan generar los fondos necesarios para su sostenibilidad. Este es el caso de los Programas de Posgrado en Especialidades Médicas y del caso de los Programas de Posgrado en Administración de Empresas, en Mercadotecnia, en Negocios, etc.

Existen una mayoría de casos de posgrados de financiamiento CONACYT de mediana o baja demanda, lo cual no permite que estos tengan una matrícula numerosa e ingresos suficientes para cubrir sus costos de operación. Vale la pena resaltar la gran heterogeneidad en tamaño de los posgrados de financiamiento CONACYT. Unos, los grandes, tal vez 3 o 4 de ellos, pueden considerarse casi autosuficientes. Otros, la gran mayoría, son programas de muy escasos recursos, los cuales han de recurrir a fondos de sus unidades académicas propias para cubrir el pago de profesores y la compra de materiales básicos para su subsistencia. Con sus ingresos propios dificilmente cubren su apoyo secretarial, y el pago de un porcentaje bajo de sus docentes. Preocupa la falta de coherencia entre la visión universitaria de que estos programas viven en la opulencia, y su realidad: la carestía de recursos con la cual deben existir. Preocupa además la percepción, también casi generalizada, de que estos programas no son de la misma calidad que los programas regulares. Es esta última percepción que motiva al análisis comparativo entre los diferentes tipos de posgrados que se presenta a continuación.

Los posgrados de financiamiento CONACYT dependen en mayor medida de contar con un número adecuado de estudiantes que los posgrados regulares. De hecho, la sostenibilidad de estos dependen de los ingresos por pago de matrícula, lo cual hace que la modalidad con la cual son impartidos se deba ajustar a las características de la población meta. Esto se refleja no solo en la diversidad de medios para su divulgación (presentado más adelante) sino que ha causado que se utilice una diversidad mucho mayor de diseños curriculares en adición al semestral, el cual es tradicional en la Universidad de Guadalajara. Existen un número creciente de posgrados de financiamiento CONACYT.

#### CONCLUSIONES

La educación superior a nivel de posgrado actualmente, tiene un importante reto en la necesaria elevación de la calidad de los profesionales, la orientación de graduados universitarios hacia las áreas económicas y sociales con mayores demandas de profesionales, la mayor pertinencia e impacto de los programas de formación y superación, así como mayor eficiencia y sostenibilidad en la superación profesional y científica permanente de nuestros profesionales, aprovechando los sistemas de información y comunicación con contenidos actualizados y que pueden ser consultados en tiempo real y con un grado de confiabilidad considerable. La instrumentación de un grupo de nuevas estrategias desde la gestión de recursos extraordinarios que otorgan para el nivel de posgrado pueden permitir una mayor respuesta a los retos actuales de calidad, pertinencia, eficiencia y sostenibilidad que tienen que afrontar las Instituciones de Educación Superior, y pueden utilizar las herramientas informáticas que se encuentran al alcance de todos.El análisis comparativo entre los diferentes tipos de posgrados según los datos reportados en el Informe de Labores 2010, evidencian paridad en muchísimos de los criterios de calidad reflejados por el Informe de Labores el cual se inspira en el Marco de referencia para la

Evaluación y Seguimiento de los Programas de Posgrado. Los programas regulares pareciera que viven en una zona de mayor confort que los adormece en algunos aspectos importantes como: la adecuación de su oferta académica a las necesidades de la población profesional de utilizar la totalidad del año en su formación, la diversidad de medios de divulgación existentes para la atracción de los mejores candidatos, la necesidad de capacitación continua de sus docentes, y más sorprendentemente, la necesidad de divulgar sus resultados de investigación. Los posgrados de financiamiento CONACYT, por otro lado, han sido más débiles en buscar atraer estudiantes extranjeros para enriquecer sus experiencias en el aula y tener un mayor impacto mundial. El descubrimiento más interesante de la investigación en la gestión de los programas de posgrado mixtos, los cuales administran programas regulares y de financiamiento CONACYT, en su seno, sobre los programas homogéneos.

Estos programas muestran: mayor agresividad en el uso de medios de divulgación para la atracción de la población estudiantil, mayor conciencia de parte de sus docentes para involucrarse en actividades de formación continua y lo más importante, mayor efectividad para divulgar sus resultados de investigación e involucrar a los estudiantes en esta divulgación. La COMEPO ve con muy buenos ojos estos resultados, los cuales sirven para disminuir muchas de las percepciones universitarias de que los programas de financiamiento CONACYT, que carecen de motivaciones académicas. Estudios longitudinales y a mayor profundidad son necesarios para obtener conclusiones más certeras, sin embargo, el análisis comparativo nos invita a la reflexión y nos permite conocer más la gestión de nuestros programas de posgrado.

Las universidades públicas como la Universidad de Guadalajara, son organizaciones forzadas a cambiar, acorde a las exigencias de la sociedad y de los organismos reguladores actuales. El diseño y creación de programas educativos de posgrado que impulsen el desarrollo de la investigación local, regional y estatal, la formación de recurso humano de alto nivel y la resolución de problemáticas de las organizaciones locales, favorecen el desarrollo de la sociedad. La universidad pública requiere contar con programas de posgrado en la oferta educativa que coadyuven en el cumplimiento de sus funciones sustantivas (generación y aplicación de nuevos conocimientos a través de la investigación); sin embargo, se requiere que estos programas y su operación se realice con el pleno conocimiento de sus principales responsables, respecto a lo que es necesario hacer para el aseguramiento de la calidad.

Respecto a la evaluación, ésta es un asunto inmerso en los procesos institucionales y de los programas educativos relacionados con la prospección, la planeación, la gestión y la toma de decisiones orientadas a mejorar la calidad del servicio educativo, en este caso, el posgrado. A lo largo de su historia, la U de G ha creado programas educativos de nivel posgrado conforme las necesidades de la sociedad; sin embargo se reconoce que no se ha logrado transitar hacia la consolidación de éstos, ya que son diversos los factores

que lo limitan (profesores habilitados en el campo de interés, presupuesto de operación escaso, infraestructura insuficiente, entre otros). La universidad pública considera que el programa de doctorado en ciencias administrativas representa un modelo a seguir, para el diseño de creación de nuevos programas de posgrado de calidad que contribuyan a la atención de la demanda del estado y su impacto en el desarrollo local.

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# ESTRATEGIAS PARA EL MEJORAMIENTO DE LA CADENA DE SUMINISTRO PARA EL MODELO SCOR

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#### RESUMEN

En este artículo de investigación se presentan los resultados obtenidos durante el desarrollo del proyecto Estrategias para el mejoramiento de la cadena de suministro para el modelo SCOR, en una empresa comercializadora de productos farmacéuticos en la ciudad de Cartagena, inicialmente se realizó una descripción detallada de los modelos de operación para la cadena de suministro basada en la estructura del Modelo SCOR, la estrategia benchmarking y los avances tecnológicos y el usos del lean manufacturing para implementar la eficacia en todos los procesos de la empresa, lo que permitió desde una perspectiva descriptiva, argumentativa, propositiva y cuantitativa, identificar las fallas que se presentaban en cada una de las actividades ejecutadas y plantear una propuesta de Plan de Mejoramiento para la Cadena de Suministro eliminando las actividades que no aportaban valor, con el fin de generar beneficios tangibles para el cliente.

PALABRAS CLAVES: cadena de suministro, modelo SCOR, mapa de procesos, benchmarking, lean manufacturing, cliente.

#### ABSTRACT

This research paper present the results obtained during the development of the project Strategies for improving the supply chain for the SCOR model, in a marketer of pharmaceuticals in the city of Cartagena, initially there is a detailed description of operating models for supply chain based on SCOR Model framework, benchmarking strategy and technological advances, and the applications to implement lean manufacturing efficiency in all business processes, which allowed from a descriptive, argumentative , proactive and quantitative perspective to identify failures presented in each of the activities performed and a proposal for the Supply chain improvement plan, eliminating activities that didn't provide value, in order to generate tangible benefits for the customer.

**KEYWORDS:** supply chain, SCOR Model, Processes Map, benchmarking, lean manufacturing, customer.

# INTRODUCCIÓN

En este artículo, se presenta la definición y conceptualización de las estructuras operativas y modelos de gestión, así como un plan de mejoramiento, como resultado de la implementación del modelo SCOR en una empresa comercializadora de productos farmacéuticos en la ciudad de Cartagena. La metodología utilizada en el transcurso del proyecto fue la propuesta por el Supply Chain Operations Reference Model (SCOR Model), ideado por el Concejo Mundial para la Cadena De Suministro.

#### Revisión Teórica

A continuación se realiza una revisión teórica, la construcción y aplicación del modelo SCOR en una empresa de distribución de productos farmacéuticos en Cartagena; y se presenta el plan de mejoramiento. Para lo anterior se utilizó el benchmarking, el sistema lean manufacturing y el uso adecuado de los avances tecnológicos y la estandarización de sus procesos articulando el modelo SCOR.

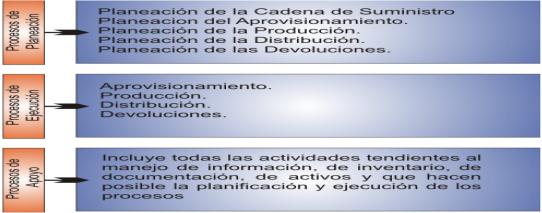
#### El Modelo De Operaciones Para La Cadena De Suministro (SCOR Model).

El Supply Chain Operations Reference Model (SCOR Model), es un modelo ideado por el Consejo Mundial de la Cadena de Suministro (Supply Chain Council), El Modelo de Referencia de Operaciones para la Cadena de Suministro es un modelo desarrollado para describir todas las actividades que una empresa ejecuta mediante fases para satisfacer la demanda de los clientes, el modelo se organiza teniendo en cuenta los cinco procesos básicos que se llevan a cabo en la empresa: Planeación, Aprovisionamiento, Producción, Distribución y Devoluciones (Supply Chain Council, 2006).El modelo SCOR no utiliza métodos matemáticos ni experimentos de ensayo y error, su aporte se basa en que utiliza una terminología estandarizada y el uso de KPI's para comparar e identificar diferentes alternativas y estrategias para el desarrollo de la SC (Calderón y Larios, 2005).

#### Estructura del modelo SCOR.

Para el análisis de Cadenas de suministro el modelo SCOR tiene en cuenta a los proveedores de los proveedores hasta los clientes de los clientes, considerando la cadena de suministro en su sentido amplio, identifica para toda empresa cinco procesos básicos: planificación, aprovisionamiento, fabricación, distribución y devoluciones. Adicionalmente el SCOR plantea una clasificación la cual denomina "Tipos de Procesos" y en la que están incluidos los cinco procesos mencionados anteriormente (Poluha, 2007), dividiéndolos en tres clases de procesos: 1) *De planeación 2) De ejecución 3) De apoyo*. La Figura 1 representa la forma de clasificación de los procesos planteada por el modelo SCOR.

Figura 1: Clasificación de los procesos en el modelo SCOR.



Fuente: Elaborado por los Autores

De la misma forma el modelo SCOR plantea que la demanda se puede satisfacer de cuatro formas diferentes: 1) Contra Stock, 2) Contra Pedido, 3) Contra Proyecto 4) Distribución a minoristas Para el proceso de Devoluciones el Modelo SCOR también define tres formas en las cuales se puede presentar: 1) Devoluciones de productos defectuosos, 2) Devoluciones de productos para reparación general y 3) Devoluciones de productos en exceso.

#### Desarrollo Del Modelo SCOR Y Mapa De Procesos Estándar.

El modelo SCOR se desarrolla en tres fases para el análisis de los procesos de la cadena, en la Figura 2 se explica la forma como de implementa el Modelo en cualquier empresa.

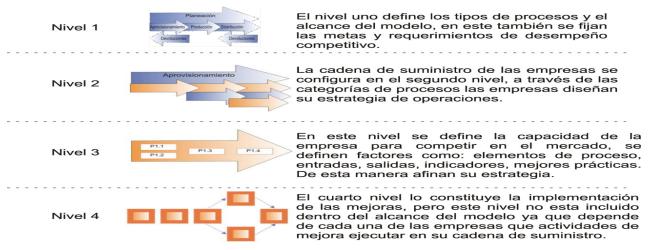


Figura 2: Fases de desarrollo y aplicación del modelo SCOR.

Fuente: Elaborado por los Autores.

# METODOLOGÍA

Para el desarrollo de esta Investigación se analizó la problemática desde una perspectiva descriptiva, argumentativa, propositiva y cuantitativa con el apoyo del Modelo SCOR, se estableció el plan de mejoramiento de la cadena de suministro de la empresa comercializadora de productos farmacéuticos. Así mismo, a través de la investigación se estableció una metodología y criterios con el fin de realizar un análisis y argumentación para proponer una estructura operativa y explicita asociada al objeto de estudio y establecer de esta forma uno planes de mejoramiento pertinentes, tomando los parámetros, variables y restricciones del caso. La información requerida para la investigación se recogió mediante entrevistas no estructuradas a los trabajadores y directivos de las diferentes empresas. Una vez desarrolladas fases del Modelo se procedió a analizar y a detectar las fallas que se presentan en la Cadena de Suministro presentando el modelo de referencia SCOR y las estrategias para al plan de mejoramiento de la Cadena

#### RESULTADOS

#### El Benchmarking Y Las Mejores Prácticas.

Las mejores prácticas utilizadas para la administración de la cadena de suministro para éste proyecto fueron la: gestión colaborativa e integración de proveedores, uso de tecnologías y software de gestión (EDI, CAM, CAD), justo a tiempo, comunicación integrada y alineamiento estratégico.

El Modelo SCOR facilitó establecer mejores prácticas para la empresa comercializadora de productos farmacéuticos de la ciudad de Cartagena teniendo en cuenta que los procesos ejecutados se modelaron considerando el estándar referenciado.

#### El sistema "lean manufacturing".

La estrategia lean manufacturing (producción ajustada), es un término acuñado a principios de los años noventa por empresas japonesas, ésta estrategia consiste en ejecutar los procesos minimizando los recursos necesarios, los desperdicios y maximizando el valor de los productos. Esta estrategia identifica varios tipos de desperdicios (De Arbulo, 2007).Según la estrategia lean manufacturing el desperdicio con mayor impacto en las operaciones de la empresa comercializadora de productos farmacéuticos de Cartagena es la sobreproducción. Dentro de los beneficios obtenidos en la empresa por la utilización del

lean manufacturing se encontraron: reducción del lead time, la reducción de los inventarios, aumento de la productividad, disminución del uso de espacios y la disminución de los costos y no la calidad.

### Uso De Avances Tecnológicos.

Los directivos de la empresa comercializadora de productos farmacéuticos de Cartagena deben mantenerse al tanto de los últimos avances en materia tecnológica para la gestión de la cadena de suministro. Cuando la tecnología de la empresa es eficaz, los beneficios son enormes (Slone, Dittman & Mentzer, 2010). Por lo que se propuso en ésta investigación el uso de tecnologías de información, software especializado e internet en la gestión de la cadena de suministro con lo que se buscó aumentar la velocidad de los procesos, reducir costos y flexibilizar el funcionamiento total de la cadena.

### CONCLUSIÓN

Con la realización del plan de mejoramiento de la empresa comercializadora de productos farmacéuticos utilizando el modelo SCOR, se tuvieron en cuenta herramientas como el benchmarking que facilitó la identificación de las mejores formas de llevar a cabo los procesos desarrollados por las otras empresas, identificando de esta manera como aumentar la calidad de los productos y disminuyendo los costos. En la creación del plan de mejoramiento de la empresa también se utilizó el sistema lean manufacturing generando como resultado que el desperdicio con mayor impacto en las operaciones de la empresa comercializadora de productos farmacéuticos de Cartagena es la sobreproducción, si se logra eliminar la sobreproducción los demás desperdicios se identificarían con mayor facilidad, reduciendo de esta manera el lead time, los inventarios, se disminuyen espacios, costo pero no la calidad y se aumenta la productividad.Para lograr que la empresa obtenga grandes beneficios debe hacer un adecuado uso de los avances tecnológicos y estandarizar sus proceso, para gestionar la cadena de suministro diseñada sobre el modelo SCOR.

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# EL LIDERAZGO COMO EJE DINAMIZADOR DE LA EQUIDAD SOCIAL

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### RESUMEN

La asignatura de Liderazgo que se imparte en los programas de la Facultad de Ciencias Económicas y Administrativas de la Universidad Autónoma de Occidente tiene como objetivo principal, que los estudiantes estén en la capacidad de reconocer sus habilidades, conocimientos y valores relacionados con el liderazgo, que les permitan no solo identificar las posibles dimensiones del mismo, sino las estrategias competitivas para reconocer el contexto social en el que habitan y se desenvuelven. Para lograrlo, es necesario que los estudiantes desarrollen un proyecto integrador durante el periodo académico, en el cual aplican los temas abordados en clase y ponen en práctica las habilidades que de manera innata o aprendida se tienen de líder; como son la capacidad de influir, de tomar decisiones, de comunicar, entre otras. Dicho proyecto se puede trabajar desde varios frentes, a nivel organizacional o a nivel social, como es el caso de los proyectos fruto de esta propuesta, en el que los estudiantes trabajan con poblaciones vulnerables como jóvenes deportistas de escasos recursos, niños huérfanos, madres cabeza de familia, jóvenes drogodependientes, jóvenes dedicadas a la prostitución, jóvenes de escasos recursos que cursan bachillerato, jóvenes adolescentes en embarazo y niños que padecen enfermedades de alto riesgo.

PALABRAS CLAVES: Liderazgo, influencia, intervención social, aprendizaje.

# THE LEADERSHIP LIKE REVITALIZING AXIS OF THE SOCIAL EQUITY

### ABSTRACT

The subject of Leadership that is given in the programs of the Faculty of Economic and Administrative Sciences of the Universidad Autónoma de Occidente has as principal aim that the students are in the aptitude to recognize his skills, knowledge and values related to the leadership, which the possible dimensions of the same one should allow him not to identify only, but the competitive strategies to recognize the social context in which they live and are unrolled. To achieve it, it is necessary that the students develop an of integration project during the academic period, in which they apply the topics approached in class and put into practice the skills that in an innate or learned way are had of leader; since they are the aptitude to influence, of taking decisions, of reporting, between others. One can work the above mentioned project from several fronts, to level organizacional or at the social level, since it is the case of the projects product of this offer, at that the students are employed with vulnerable populations like young sportsmen of scanty resources, orphan children, mothers head of household, drugdependent young men or women, young women dedicated to the prostitution, young women of scanty resources who deal baccalaureate, teen young women in pregnancy and children who suffer diseases of high risk.

JEL: M12, M53. KEYWORDS: leadership, influence, social intervention, learning.

### INTRODUCCIÓN

Actualmente la gestión del talento humano deja de lado su rol operativo para constituirse en un área estratégica, que privilegia la participación de los colaboradores en los procesos de toma de decisiones organizacionales; planteando así la necesidad en las empresas de potencializar su talento humano, a través del desarrollo de diversas habilidades, en especial las del liderazgo, que corresponde según Lussier y Achua (2002), al proceso en el cual influyen líderes sobre seguidores y viceversa, para lograr los objetivos de una organización a través del cambio.

Dadas las características del actual entorno, es imprescindible que el liderazgo se ejerza desde los diferentes niveles administrativos, pues la rápida y efectiva toma de decisiones depende del empoderamiento de los colaboradores y su capacidad para liderar procesos desde sus asignaciones de trabajo; consideraciones que han evolucionado desde las teorías clásicas del liderazgo hasta la aparición de nuevos paradigmas basados en la capacidad del líder para interpretar el entorno y encauzar los esfuerzos de las personas a su cargo, en la consecución de los objetivos de la organización.

Para lograrlo, es imprescindible que desde el aula, se potencialicen las habilidades del liderazgo, a través de procesos de formación aprendizaje autónomos, que le permitan al estudiante, adquirir no solo el bagaje conceptual sino también la experiencia, a partir de la puesta en práctica de la teoría impartida. Este trabajo entonces muestra los procesos investigativos de mayor impacto desarrollados en el aula, en la forma de proyectos de intervención en comunidades vulnerables, realizados por los estudiantes que cursan la asignatura de liderazgo, ofrecida por el Departamento de Ciencias Administrativas de la Facultad de Ciencias Económicas y Administrativas de la Universidad Autónoma de Occidente de Cali, Colombia.

Para llegar a los resultados de las intervenciones de mayor impacto, fue necesario realizar un análisis de los proyectos desarrollados por los estudiantes desde el periodo 2006-3 al 2012-1, seguidamente contrastar los resultados obtenidos en los proyectos versus los objetivos de la asignatura de liderazgo, considerando el impacto de éstos tanto en la población objetivo como en los estudiantes proyectistas, para finalmente seleccionar los proyectos exitosos según los benefícios obtenidos por todos los participantes.

# **REVISIÓN LITERARIA**

Dado que esta investigación está enmarcada dentro del contexto del liderazgo, el marco teórico se desarrollará teniendo en cuenta que el liderazgo como tal, constituye un aspecto determinante no solo del crecimiento y sostenibilidad de las empresas en el largo plazo, sino también como dinamizador de los procesos de cambio sociales.

### El Líder Y El Liderazgo

Existen varias definiciones de liderazgo, sin embargo, no existen acuerdos respecto a la acepción más idónea; así que se utilizará la definición dada por Robert Lussier y Christopher Achua (2002), que define el liderazgo "como el proceso en el cual influyen líderes sobre seguidores y viceversa, para lograr los objetivos de una organización a través del cambio". En cuanto al papel del líder y sus funciones, se encuentra que el líder es una persona que puede ser administrador o subordinado, quien cuenta con la habilidad de influir sobre los demás; y que debe desempeñar una serie de funciones en busca del logro de los objetivos en forma mancomunada con su equipo de trabajo. A partir de esa capacidad de influenciar del líder, Henry Mintzberg (2002) plantea que éste debe ejercer 10 papeles, los cuales se clasifican en funciones interpersonales, informativas y decisionales. Dentro de las funciones interpersonales (Lussier, 2002) se encuentran la función de representación, que es cuando el líder actúa en nombre de la organización o del área que dirige en diferentes actividades como firmar documentos, recibir clientes, asistir a reuniones, presidir ceremonias, entre otras. La función de líder, que consiste en desempeñar

labores administrativas para operar en forma eficaz la unidad que el líder tiene a su cargo, entre las que están: escuchar, entrenar, instruir, capacitar y evaluar el desempeño; y la función de enlace, que se refiere a que el líder se relaciona con personas externas a la organización a través por ejemplo de la conformación de comisiones con personas de otras organizaciones, la asistencia a reuniones de asociaciones gremiales y reuniones que pretenden establecer o fortalecer relaciones.

Las funciones informativas (Lussier, 2002) abarcan la función de monitoreo, que se da cuando el líder obtiene información a través de la lectura de periódicos, revistas y comunicados; de la asistencia a reuniones internas y externas y de las visitas a los negocios de la competencia; todo esto con el fin de identificar oportunidades y amenazas existentes en el entorno. La función de difusión, en la cual el líder informa a su personal acerca de estrategias, políticas y cambios que suceden en la empresa, lo cual puede hacerlo en forma oral (correo de voz, reuniones grupales) y/o en forma escrita a través del correo electrónico y memorandos; y la función de portavoz, que consiste en dar informes a personas externas de la organización, como son responder cartas, rendir cuentas al gobierno y a las entidades reguladoras.

Por su parte, entre las funciones decisionales (Lussier, 2002) se encuentran la función de emprendedor, que consiste en que con base en la información obtenida al desarrollar la función de monitoreo, el líder coloca en marcha estrategias de innovación como crear y/o mejorar los productos y los procesos, adquirir nuevos equipos, etc. La función de manejo de dificultades, es cuando el líder realiza acciones correctivas durante las crisis o situaciones conflictivas como huelgas, daños de maquinaria, demora en la entrega de los productos y cumplimiento de programas sin margen de tiempo. La función de asignación de recursos implica programar y realizar actividades presupuestarias así como autorizar la utilización de diversos recursos (administración del tiempo, aumento salarial, utilización de materiales y equipos); y la función de negociador, que implica realizar actividades de negociación como: acordar el aumento salarial, negociar con sindicatos, con clientes y proveedores.

### Primeras Teorías Del Liderazgo

Para abordar el tema del liderazgo es necesario previamente referirse a las teorías que han posibilitado los desarrollos en esta temática. En primera instancia, surge la teoría de rasgos (Lussier, 2002) que partió del supuesto de que el líder nace, no se hace. Ésta surgió en los años 30 y 40 y buscaba identificar un conjunto de rasgos comunes a todos los líderes exitosos, por tal razón los investigadores analizaron rasgos físicos y psicológicos, niveles de energía, apariencia, agresividad, independencia, poder de persuasión y dominio. Los que cumplían con la lista de rasgos eran promovidos a posiciones de liderazgo; fue así como esta teoría dio origen a la investigación llamada "el método del gran hombre o de la gran persona" (Hughes, Ginnett, Curphy, 2007), en el que se clasificaron los rasgos dentro de alguna de las dimensiones de emocionalidad, empatía, ajuste, escrupulosidad y apertura a la experiencia. Algunos de los rasgos estudiados fueron el dominio, la gran energía, la confianza en sí mismo, el locus de control, la estabilidad, la integridad, la inteligencia, la flexibilidad y la sensibilidad hacia los demás.

A medida que pasó el tiempo esa teoría fue invalidada, pues como su planteamiento base era que el líder nacía y no se hacía, se encontró que muchas de las personas que tenían esos rasgos no eran líderes, sin querer decir con lo anterior que no ser líder es desventajoso, por el contrario el ser seguidor es fundamental, pues son éstos los que le ayudan al líder a lograr los objetivos. Así que aparece la teoría del comportamiento (Lussier, 2002) o teoría universal que surgió en la década de los 50, en la cual las investigaciones pasaron de concentrarse en la teoría de rasgos a comportamientos que desempeña el líder en el trabajo, es decir en identificar acciones concretas de los líderes, tratando de explicar los estilos distintivos de los líderes eficaces o de definir la naturaleza de su labor. En cientos de estudios se examinó la relación entre el comportamiento del líder y las medidas de efectividad en el liderazgo; sin embargo no hubo acuerdo sobre cual era el mejor estilo de liderazgo para cualquier situación.

Ésta tampoco fue validada, porque no había comportamientos únicos que identificaran al líder, es decir había personas que tenían esos comportamientos y no eran líderes; surge entonces en la década de los 60, la teoría situacional o por contingencia (Lussier, 2002), cuyo pionero fue el señor Fred Fiedler, quien en 1965 publicó en Harvard Business Review este interesante enfoque del liderazgo, que consistía en cambiar la situación de una organización para acomodarse al estilo del líder, en vez de cambiar para acomodarse a la situación de ésta. En este modelo, el éxito del liderazgo lo determinan primordialmente: el grado en que esta estructurada la tarea, el grado de posición de poder que tiene el líder y el tipo de relación que existe entre el líder y los seguidores.

Este trabajo de Fiedler ayuda a destruir los mitos de la existencia de un único mejor estilo de liderazgo y que los líderes nacen, no se hacen; además apoya la idea de que casi todos los gerentes de una organización pueden ser líderes exitosos si se les coloca en una situación apropiada al estilo de liderazgo de esa persona. De acuerdo a lo anterior entonces, se concluye que el liderazgo está en función del líder como tal, o sea el estilo de liderazgo individual, los seguidores y la situación. Es por esta razón que se encuentran gerentes que son muy exitosos en algunas compañías pero fracasan en otras, pues es necesario colocar al líder en la situación apropiada a su estilo de liderazgo.

### Teorías Del Liderazgo Relacionadas Con El Cambio Organizacional

El entorno actual se caracteriza por ser cambiante, dinámico y sobre todo muy competitivo, lo que hace que los dirigentes de las organizaciones sean cada vez menos jefes y más líderes, trabajando en equipo, empoderando a su personal para que tome las mejores decisiones y siendo proactivos al cambio, en busca de adoptar estrategias acordes con las exigencias del entorno, pretendiendo además no solo el crecimiento de la organización sino el bienestar de las personas que la integran. Esto conlleva a repensar el rol del líder, haciendo especial énfasis en sus características como persona; y es así como surgen teorías del liderazgo que se basan en otro paradigma: servir en lugar de mandar.

El liderazgo carismático por ejemplo, se basa en el carisma, que procede de la voz griega charisma que significa "don abundante concedido por Dios a una criatura" (Lussier, 2002). Así que es ese don de saber llegar a las personas y es de suponer que todas las personas cuentan con ello, sin embargo no es tan fácil encontrar este rasgo en alguien, pues implica saber comunicarse, interactuar y colocarse en los zapatos del otro. El líder carismático entonces se define como la persona que lidera, y es capaz de inspirar confianza en el otro, es por esto que generan fuertes niveles de resistencia en un momento determinado, ya que las demás personas los aman o los odian fervorosamente.

Ejemplos de este tipo de líderes: Juan Pablo II, Luis Carlos Galán, Jorge Eliécer Gaitán, cuyos seguidores se identificaban personalmente con ellos, generando emociones muy fuertes, que logran identificación personal y son poseedores de un gran poder de convencimiento. Algunos plantean que el liderazgo carismático surge gracias a las cualidades del líder; otros que puede surgir cuando se presentan crisis en la sociedad y hay quienes consideran que éste no depende de las cualidades del líder ni de la presencia de una crisis únicamente, sino que se trata de un fenómeno provocado por interacciones entre estos dos aspectos; planteamiento que tiene cada vez mayor aceptación. Entre las características de los líderes carismáticos (Yukl, 2008), se encuentran: visión de futuro; formas expresivas de comunicarse; asumen riesgos personales y hacen autosacrificios; comunican altas expectativas; capacidad para inspirar confianza; dan ejemplos con conductas coherentes con la visión; gestionan las impresiones que tienen los seguidores del líder; crean una identificación con el grupo o la organización; y delegan poder a sus seguidores. El liderazgo transformacional (Lussier, 2002) por su parte, consiste en que el líder más que destacarse por sus atributos personales, es quien genera cambios en la organización, haciendo que sus seguidores se comprometan con el logro de los objetivos organizacionales, dejando de lado su interés personal egoísta. Los líderes transformacionales se conciben como agentes de cambio; son visionarios y confían en su intuición; corren riesgos, pero no de manera irresponsable; son capaces de articular un

conjunto de valores medulares que guían su comportamiento; poseen capacidades cognoscitivas excepcionales y analizan las situaciones minuciosamente antes de actuar; creen en la gente y muestran sensibilidad a sus necesidades; y son flexibles y están abiertos a aprender de la experiencia

Respecto al liderazgo transaccional, se tiene que es un líder que busca mantener la estabilidad en lugar de promover el cambio en una organización, mediante intercambios económicos y sociales regulares con los que consiguen objetivos específicos tanto para los líderes como para los seguidores (Lussier, 2005). El líder transaccional establece convenios contractuales con los seguidores a cambio de cumplir con determinados objetivos o realizar ciertas tareas, o sea que ofrece beneficios tangibles (dinero) e intangibles (reconocimiento) que satisfacen las necesidades y las expectativas de los seguidores. Vale la pena mencionar que los buenos líderes manifiestan tanto habilidades de liderazgo transaccional como transformacional en las situaciones que así lo exigen.

En cuanto al liderazgo estratégico se refiere, Lussier (2002) plantea que los buenos líderes estrategas serán los que supervisen de continuo el entorno para asegurar una correspondencia en términos de competitividad entre sus estrategias y el ambiente; así que la función del liderazgo estratégico es realizar en forma efectiva la planeación estratégica. A raíz de que se presentan en las organizaciones muchas falencias relacionadas con la ausencia de valores, es decir que las personas actualmente piensan que se logran los objetivos a partir del perjuicio de los demás, aparecen dos tipos de liderazgo: el de apoyo y el de servicio (Lussier, 2005). El liderazgo de apoyo es un estilo de liderazgo enfocado en el empleado, que confiere autoridad a los seguidores para que tomen decisiones y ejerzan control sobre su trabajo. En este tipo, la relación entre líderes y seguidores es colaborativa, en un ambiente de respaldo recíproco para alcanzar las metas organizacionales. Los valores del liderazgo de apoyo son: marcada orientación al trabajo en equipo; empoderamiento de los seguidores; sentimiento de una relación entre iguales; y compensación justa y equitativa acorde al desempeño.

El liderazgo de servicio es un estilo de liderazgo que trasciende el interés personal para resolver las necesidades de los demás, ayudándolos a crecer profesional y emocionalmente. Este estilo opera bajo la premisa de que todos tenemos un deber moral unos con otros; así que se percibe como una oportunidad de servir a los niveles básicos y no como de dirigir desde la cima. Las guías de este tipo de liderazgo son: ayudar a descubrir el potencial de los seguidores; confianza mutua; interés colectivo por encima del individual; y escucha atenta a las necesidades de los seguidores. Por lo anterior, es que se dice que se cuentan con tan pocos líderes en las organizaciones, pues generalmente en posiciones de autoridad, el interés se centra en dirigir a los demás, más que en dimensionar dicho rol a partir de una actitud de servicio frente a los colaboradores, anteponiendo sus necesidades a las propias.

# METODOLOGÍA

Esta investigación se desarrolló utilizando los procedimientos asociados a la investigación de tipo bibliográfica, pues era necesario documentar a partir de fuentes, principalmente secundarias, las teorías y conceptos relacionados con el liderazgo, que permitieron a los estudiantes realizar los procesos de intervención con las poblaciones beneficiarias. También se hizo uso de los procedimientos de la investigación descriptiva y exploratoria, pues era necesario conocer directamente de las personas beneficiarias de los proyectos su situación particular, a través de encuentros presenciales, para indagar acerca de sus expectativas y necesidades; y poder así plantear actividades de intervención que permitieran contribuir a la mejora de la calidad de vida de esas personas y de sus familias.

# Métodos A Utilizar

El método de observación: advierte sobre cómo se presentan los hechos; en este caso, consiste en la observación de las características de la población a ser intervenida. El método inductivo: como proceso

del conocimiento, se inicia por la observación de la realidad actual que está enmarcada por la situación real, de las personas que participan en los diferentes proyectos. El método de análisis: es parte de la interpretación de la situación actual, de las personas participantes en los proyectos y de la contribución que se hace para mejorar su calidad de vida a través de las actividades desarrolladas por los estudiantes.

### Proceso Metodológico

La metodología utilizada para el desarrollo de los proyectos con poblaciones vulnerables contiene cuatro fases principales:

- 1. El establecimiento de las reglas de juego referentes al universo de poblaciones vulnerables con las que se pudieran trabajar, determinando la frecuencia de interacción, así como los criterios de escogencia.
- 2. El monitoreo del desempeño de los equipos de trabajo, referente a la consecución de la población beneficiaria y la orientación en las actividades a desarrollar.
- 3. La revisión de avances, que contienen las actividades desarrolladas con la población beneficiaria en el período académico, realizando la retroalimentación pertinente en relación directa con los objetivos de la asignatura.
- 4. La presentación de los proyectos finales, que abarcan las actividades desarrolladas en su totalidad, así como los aprendizajes de los proyectistas y el testimonio de algunas personas beneficiarias de los proyectos.

### RESULTADOS

Los resultados obtenidos en estos proyectos de intervención con poblaciones vulnerables, corresponden a las diferentes actividades que desarrollan los estudiantes que cursan la asignatura de liderazgo en el transcurso del período académico.

### Población: Niños Y Jóvenes De Escasos Recursos (Fundación O Escuela)

Algunas de las actividades desarrolladas, especialmente con niños que cursan educación primaria consistieron en la realización de jornadas de capacitación acerca de comprensión lectora y escritora, reforzando el aprendizaje ofrecido por la institución que los acoge. También se desarrollaron jornadas lúdicas y de integración, que permitieron reforzar valores como el respeto hacia el otro y así dinamizar el trabajo en equipo. En cuanto al manejo del medio ambiente se realizaron jornadas consistentes en capacitaciones acerca de los procesos de reciclaje y compostaje, que permitieron sensibilizar tanto a los niños como a sus padres, respecto de la importancia de adoptar este tipo de prácticas para el futuro de la humanidad. Como un aporte al bienestar integral de los niños y jóvenes se llevaron a cabo jornadas saludables, como valoración por médicos y odontólogos, aportando a la detección temprana de posibles enfermedades. En el caso de los jóvenes se ejecutaron charlas referentes a la orientación profesional y a los aspectos a tener en cuenta al elaborar una hoja de vida, buscar empleo, hablar en público y presentar una entrevista de trabajo, que permitió a éstos conocer sus fortalezas y acercarse a las primeras experiencias, cuando se incursiona al mundo laboral.

Así mismo, se desarrollaron capacitaciones sobre el proceso de selección de personal, donde los jóvenes identificaron los requerimientos de las empresas, y resolvieron test de personalidad que les posibilitó conocer un poco más acerca de sí mismos, y generar planes de acción conducentes a superar muchas de sus debilidades.

### Población: Jóvenes Deportistas

Al trabajar con estos jóvenes de escasos recursos, a través de jornadas competitivas se desarrolló su espíritu de lucha y la importancia de la perseverancia y la disciplina para el logro de los objetivos. Se dieron también charlas educativas enfocadas a reforzar la confianza en sí mismos, a través de su participación activa en la reflexión sobre el liderazgo, la motivación, el trabajo en equipo, la tolerancia y el apoyo mutuo. Se realizaron capacitaciones acerca de esfuerzo volitivo y desarrollo cognitivo; identificando a través de diversos tests, su capacidad deportiva y esfuerzo físico. Complementando las actividades y con el ánimo de diversificar en estos procesos de intervención, se llevaron a cabo festivales, rifas y jornadas de donación que permitieron dotar a los jóvenes de implementos deportivos como uniformes, petos y guayos. Igualmente se puso en contacto a los jóvenes con algunos deportistas profesionales, quienes les ofrecieron testimonios de sus procesos, permitiéndoles saber lo que significa y representa el deporte para algunos de sus referentes.

### Población: Jóvenes En Embarazo Y Madres Cabeza De Familia

El proceso de intervención con las jóvenes en embarazo (adolescentes) consistió especialmente en brindarles charlas acerca de la educación sexual y reproductiva y de la importancia de planificar, así como los problemas de un embarazo precoz, que les posibilitó sensibilizarse acerca de su situación particular. Se les realizaron también capacitaciones referentes al cuidado y control prenatal, identificando las etapas del embarazo (concepción, gestación, parto y lactancia) y los cuidados a tener durante las mismas, como estrategias de prevención y autocuidado. Por su parte, el trabajo con las madres cabeza de familia se centró en ofrecerles charlas de motivación y de ideas de negocio, que les permitió aumentar la confianza en sí mismas y la convicción de que se puede salir adelante, a pesar de las dificultades. Entre las capacitaciones se encuentran elaboración de chocolates, postres, collares, aretes, pulseras y sandalias en fíque, permitiéndoles conocer otras alternativas de generación de ingresos.

### CONCLUSIONES

Los proyectos con poblaciones vulnerables permiten conocer, resaltar y poner en práctica las habilidades que de manera innata o aprendida se tienen de líder; como son la capacidad de influir, de tomar decisiones, de comunicar, de empatizar, entre otras. El liderazgo juega un papel muy importante en toda clase de equipo y cualquier persona puede lograr ser un líder, si así lo quiere; reconociendo que cada persona tiene un estilo diferente, que es efectivo dependiendo de la situación en la que se encuentre y de las características de sus seguidores. Los equipos que desarrollan los proyectos reconocen como factores determinantes del éxito, el interés que se debe colocar a las actividades a realizar, la importancia de asumir y delegar responsabilidades admitiendo los errores, el respeto y la colaboración mutua entre los integrantes. Los logros más destacables de este tipo de proyectos es que a través de las actividades realizadas se puede sensibilizar a la población beneficiaria acerca de su valía y de la importancia de la labor que llevan a cabo, llámese un deporte, las actividades de recuperación de las drogas, los productos que elaboran, entre otras. Algunas de las enseñanzas que se pueden extractar al desarrollar los proyectos, es que a pesar de que las personas beneficiadas se desenvuelven en un ambiente hostil y lleno de dificultades, el cual conocen, son ejemplos de vida, pues quieren salir adelante por su propia cuenta, ser alguien en la vida, ayudar a sus familias y sentirse orgullosos de lo que son y de lo que transmiten.

Los proyectos sociales contribuyen de manera significativa al crecimiento intelectual y emocional de la población objetivo, pues obliga a quienes los lideran a pensar cómo satisfacer las necesidades que presentan, a concientizar a las personas del común a aportar un granito de arena para que este país salga adelante, pero sobre todo a ayudar de forma desinteresada a estas personas que tanto lo necesitan.

La realización de este tipo de proyectos es realmente gratificante, porque se interactúa desde muchos ámbitos con personas de otra condición social, lo que permite mayor conciencia y sensibilización acerca de la realidad que vive el país. Al inicio de los proyectos, se piensa en cumplir con lo exigido, pero a medida que pasa el tiempo, se siente la necesidad de ir más allá y cuando se hace, recibe de los beneficiados lecciones de vida sin pedir nada a cambio, como: reír y disfrutar de las cosas que se tienen y no sufrir por lo que no se tiene, expresiones de afecto, gratitud y reconocimiento, pero sobre todo la satisfacción de haber hecho algo por quienes más lo necesitan.

A través de las actividades realizadas se aprendió a valorar cada labor, cada una de las oportunidades que la vida ofrece y que la falta de recursos no es una limitante para realizar lo que verdaderamente se quiere."No hay mejor camino para lograr el éxito en cualquier idea o proyecto que la humildad", pues permite reconocer que sin importar la posición en la que se esté, el otro es un individuo que al igual que uno, necesita, siente y tiene expectativas. Si esta premisa la aplicaran todas las personas, las organizaciones y el mundo serían diferentes. "Lograr que las personas beneficiarias de los proyectos se comprometan asistiendo a las actividades, sin importar como este el clima, lluvioso o muy caluroso, poder apreciar sus caras de felicidad al entrar al espacio donde éstas se realizan, escuchar sus comentarios de agradecimiento, es mucho más gratificante que una calificación de cinco en cualquier asignatura".

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# OPTIMIZACION MULTIOBJETIVO EN UNA CADENA DE SUMINISTRO UTILIZANDO ANALISIS ENVOLVENTE DE DATOS (DEA) MULTIOBJECTIVE OPTIMIZATION IN A SUPPLY CHAIN USING DATA ENVELOPMENT ANALYSIS (DEA)

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### RESUMEN

En este artículo se presenta un modelo de una Cadena de Suministro que pretende reducir los costos de una empresa y el tiempo de espera entre los diferentes actores de la cadena, utilizando para ello el análisis envolvente de datos siendo esta técnica novedosa en la solución de problemas de optimización multiobjetivo. Se pretende que la aplicación de este modelo se convierta en una herramienta importante para garantizar a los directivos de empresas tomar las mejores decisiones.

PALABRAS CLAVES: cadena de suministro, optimización multiobjetivo, análisis envolvente de datos.

JEL: C02, C61, C67.

### ABSTRACT

This article presents a model of a supply chain that aims to reduce the costs of a company and the time between the different actors in the chain, using data envelopment analysis being this novel technique in solving problems multiobjective optimization. It is intended that the application of this model to become an important tool to ensure business managers make the best decision.

**KEYWORDS**: supply chain, multi-objective optimization, data envelopment analysis.

**JEL:** C02, C61, C67.

# **INTRODUCCIÓN**

El concepto de la cadena de suministro surgió debido a que proporciona soluciones al problema de la duplicación de esfuerzos y la capacidad de respuesta de las compañías [1] por lo cual la gestión de la cadena de suministro ha generado mucho interés en los últimos años. Factores como la globalización han marcado una pauta importante en desarrollo y la evolución de los estudios y aplicación de la cadena de suministro, pues cada día se exige más a las empresas crear relaciones estrechas con sus proveedores, sobre todo si se tiene en cuenta que los costos derivados de una mala coordinación pueden ser extremadamente altos. Como resultado de de esta globalización del comercio internacional, los factores de producción de abastecimiento y de consumo de los destinos de todo el mundo está aumentando la interdependencia entre productores y mayoristas de cadenas de suministro internacionales [2]. Razón por la cual la naturaleza dinámica de las cadenas de suministro requiere a los gerentes de las compañías adaptar sus estrategias de la cadena de suministro con el fin de seguir siendo competitivos [3]. Una eficiente interacción entre los diferentes actores de la cadena de suministro y la planeación de un modelo estratégico que permita visionar los diferentes eslabones de la cadena es una importante herramienta para garantizar la disminución del tiempo y contribuir con las máximas utilidades en la compañía.

### Marco Teorico

### Gestión De La Cadena De Suministro

El concepto de trabajar con proveedores y clientes es tan antiguo como el comercio mismo, pero la idea moderna de una "cadena de suministro" es bastante reciente, en algún momento de principios de los años 80, los conceptos de transporte, distribución y gestión de materiales comenzaron a unirse en un solo término: la gestión de la cadena de suministro. El término apareció por primera vez, aparentemente en forma impresa en 1982, y se atribuye a Keith Oliver [4]. Hoy en día no solo la efectividad de las plantas de producción acarrea ventaja competitiva para la empresa, sino también la unión de todos los actores que influyen en el proceso hasta la entrega final del producto, porque una cadena de suministro comienza con los proveedores y finaliza con el consumo del producto por parte del cliente.

La noción de gestión de la cadena de suministro tal como se utiliza en la investigación de varios autores está relacionada con la globalización de la producción y la inclinación por los fabricantes para abastecerse de insumos alrededor del mundo, lo que requiere la gestión de formas eficiente la regulación de los flujos globales de las entradas o salidas [2]. La Gestión de la Cadena de Suministro no es otra cosa que el sistema de gestión que establece y controla como tal toda la cadena de suministro de una compañía, este sistema no debe ser el tradicional autoritario, sino que debe ser un sistema que contemple a todos los componentes de la cadena en toda su magnitud y gestione la misma en todo su conjunto, consiguiendo así la integración de todos los componentes de la Cadena de Suministro es un factor clave para que las compañías logren alcanzar altos niveles de competitividad mediante la integración de todos los actores de la cadena de suministro [6].

Por lo cual una eficiente interacción entre los diferentes actores de la cadena de suministro y la planeación de un modelo estratégico que permita visionar los diferentes eslabones de la cadena es una importante herramienta para garantizar la disminución del tiempo y contribuir con las máximas utilidades en la compañía. Las cadenas de suministro suelen ser de alta complejidad, debido a la gran cantidad de datos, variables de decisión, interrelaciones complejas entre las variables y las limitaciones del sistema pueden llegar a presentar muchos desafíos para la gestión de tomar decisiones empresariales sólidas [7].

### Optimización Multiobjetivo

Los problemas de Optimización Multiobjetivo, a diferencia de los de optimización sencilla, incluyen un conjunto de k funciones objetivo, un conjunto de m restricciones y un conjunto de n variables de decisión [8]. Las funciones objetivo y las restricciones son funciones de las variables de decisión. Mientras que en los problemas de optimización monobjetivo se busca encontrar un vector de decisión n-dimensional que optimice una función, en la optimización multiobjetivo se intenta encontrar un vector que optimice una función vectorial, cuyos elementos representan las distintas funciones objetivo [9].

### Análisis Envolvente De Datos (DEA)

La metodología Data Envelopment Analysis es una técnica que utiliza herramientas de programación lineal para comparar unidades de producción que utilizan el mismo grupo de recursos y producen el mismo grupo de productos, generando la frontera eficiente e indicadores relativos de eficiencia dentro de la población de unidades de producción estudiadas. Se ha empleado con éxito para evaluar el rendimiento relativo de un conjunto de empresas, que por lo general se llaman Unidades de Toma de Decisiones (DMU), que utilizan los mismos insumos para producir los mismos resultados. [10]. Esta metodología fue propuesta inicialmente por Charnes, Cooper y Rhodes en 1978, cuando formularon el primer modelo DEA (modelo CCR), en base a los conceptos originalmente planteados por Farrel en 1957.

### Modelo De Cadena De Suministro

Se pretende diseñar un modelo que permita ir un paso adelante en la investigación de cadenas de suministro que busquen la minimización de los costos de producción y del lead time (LT), que se define como la variabilidad del tiempo que toma una orden desde se expide hasta que se recibe [11], por medio de la utilización de el Análisis Envolvente de Datos (DEA). La planificación de una cadena de suministro se ocupa de la coordinación y la integración de todas las actividades clave del negocio llevadas a cabo por una empresa, desde la adquisición de materias primas hasta la distribución de los productos finales para el cliente [12], por lo anterior se propone un modelo de cadena de suministro el cual se encuentra compuesto de dos tipos de materia prima, las cuales pueden ser suministradas por tres tipos de proveedores diferentes, éstos pueden o no encontrarse en el país de producción. Así mismo, el modelo planteado consta de hasta tres plantas de procesamiento de producto, tres centros de distribución y finalmente tres mercados. Para los transportes de materia prima, y de los productos desde los diferentes eslabones de la cadena se establecen dos tipos de transporte. Para el modelo propuesto las funciones objetivos a optimizar y restricciones son:

### **Funciones** Objetivos

Función Objetivo 1: Minimización de costos

Función Objetivo 2: Minimización del Lead Time de plantas

Función Objetivo 3: Minimización del Lead Time de centros de distribución

Función Objetivo 4: Minimización del Lead Time de mercados

Función Objetivo 5: Minimización Varianza del Lead Time del Proveedor a la Planta de Producción

Función Objetivo 6: Minimización de la Varianza del Lead Time de la Planta de Producción al Centro de Distribución

Función Objetivo 7: Minimización de la Varianza del Lead Time del Centro de Distribución al Mercado

Restricciones

Capacidad de los proveedores

Capacidad de las plantas

Capacidad de los centros de distribución

Balance de Plantas de Producción

Balance de Centros de Distribución

Número de plantas a instalar

Número de centros de distribución a instalar

Lead Time del Proveedor a la Planta de Producción

Lead Time de la Planta al Centro de Distribución

Lead Time del Centro de Distribución al mercado

### RESULTADOS

### Aplicación Del Análisis Envolvente De Datos (DEA)

El Análisis Envolvente Datos (DEA) es generalmente utilizado para evaluar la eficiencia relativa entre las empresas públicas o privadas. La mayoría de los modelos DEA son establecidos por maximizar la eficiencia individual de cada empresa, aunque algunos estudios han señalado la relación interesante entre el problema de programación lineal multiobjetivo (MOLP) y la metodología DEA [13]. A continuación explicamos la aplicación de la metodología DEA a nuestro problema.

### Modelo DEA CCR

En DEA la eficiencia técnica de cada una de las unidades se define como el cociente entre la suma ponderada de los Outputs y la suma ponderada de los Inputs. Si  $Y_o = (y_{1o}, y_{2o}, y_{3o}, ..., y_{so})$  y  $X_0 = (x_{1o}, x_{2o}, x_{3o}, ..., x_{so})$  representa respectivamente, las cantidades de salidas y entradas de la DMU0, la unidad que está siendo evaluada, la medida escalar de la eficiencia de la DMU0 puede ser obtenida como la solución optima del siguiente modelo conceptual.

$$Max \ \theta = \frac{\sum_{r=1}^{s} u_{ro} y_{ro}}{\sum_{i=1}^{m} v_{io} x_{io}}$$

sujeto a:

$$\frac{\sum_{r=1}^{s} u_{rj} y_{rj}}{\sum_{i=1}^{m} v_{ij} x_{ij}} \le 1 \quad j = 1, 2, \dots n$$

$$u_{ri}, v_{ii} \ge 0$$
  $r = 1, \dots s$   $i = 1, \dots m$ 

Se consideran n DMUs (j=1,2,...n) cada una de las cuales utiliza los mismos Inputs, en diferentes cantidades, para obtener los mismos Outputs, en diferentes cantidades,  $u_{ro} y v_{io}$  es el conjunto de los pesos más favorables para la DMU<sub>0</sub> en el sentido de maximizar la razón anterior. Para la aplicación del Análisis Envolvente de Datos a nuestro problema lo primero que se hace es generar una población inicial de manera aleatoria y se hace una selección de los NO dominados para generar una nueva solución.

### Variables Consideradas En El Estudio

Para cada solución generada los Inputs son los valores de las diferentes variables de decisión mientras que los Outputs se definen como la función inversa de cada una de las funciones objetivos, ya que todas estas son de minimización, aquellas soluciones que obtengan una eficiencia del 100% son las que conforman el conjunto Pareto de soluciones óptimas.

Tabla 1: Variables de Entrada y de Salida

Variables de Entrada (Inputs)	Variables de Salida (Outputs)
$Y_{be }$ , $Y_{ce }$ , $Z^1_{fabg}$ , $Z^2_{ebcg}$ , $Z^3_{ecdg}$	$(F.O_1)^{-1}, (F.O_2)^{-1}, (F.O_3)^{-1}$
$X_{abfe}$ , $X_{af}^{T}$ , $W_{fe}$ , $O_{be}^{T}$ , $O_{bce}$	$(F.O_4)^{-1}, (F.O_5)^{-1}$
$S_{ce}$ , $S_{cde}$ , $S_{ce}^{T}$ , $N_{b}$ , $N_{c}$ , $N_{d}$	$(F.O_6)^{-1}, (F.O_7)^{-1}$

### RESULTADOS

A continuación se muestran los resultados obtenidos con la aplicación del Análisis Envolvente de Datos

Tabla 2: Resultados de la solución del Modelo con Análisis Envolvente de Datos

Función Objetivo	Sol. 1	Sol. 2	Sol. 3	Sol. 4	Sol. 5	Sol. 6
Costos	1053398682	1122326591	993738711	1076506662	1001284385	11451786916
L.T. Plantas	1408.58	1464.34	1416.82	1375.10	1493.11	1428.36
L.T.Centros Dist	1471.44	1507.70	1427.91	1391.39	1512.39	1422.31
L.T. Mercados	1451.99	1544.84	1557.92	1494.21	1520.77	1532.42
Var.L.T.Plantas	12005.04	3153.15	7491.54	12806.32	4339.78	4344.70
Var.L.T. C.Dist	11582.69	24142.80	9039.49	5281.11	2425.77	8942.63
Var.L.T. Mercad.	6589.27	6603.16	5721.47	12054.19	8488.74	6669.86

### CONCLUSIONES.

- La optimización multi-objetivo de cadenas de suministro permite lograr estructuras más balanceadas logrando una mejor interacción y mejores utilidades entre cada uno de los miembros de la cadena.
- El modelo matemático desarrollado es bastante realista sin embargo al tratarse de un modelo estratégico no se tuvieron en cuenta las políticas de inventario las cuáles pueden incidir en los costos totales.
- El modelo desarrollado se puede correr con una configuración preestablecida, es decir previamente definir cuantas plantas de producción y centros de distribución se van a abrir.
- La utilización de técnicas avanzadas de optimización, como el análisis envolvente de datos, permiten obtener soluciones eficientes, teniendo en cuenta la mayoría de las variables que de una u otra forma afectan los indicadores de las cadenas logísticas de distribución.

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# LA GESTION DE LA RESPONABILIDAD SOCIAL ORGANIZACIONAL, IMPACTADA POR LA GUÍA TÉCNICA COLOMBIANA GTC180: CASO APLICADO PYME DEL SECTOR SERVICIOS EN LA CIUDAD DE CALI, COLOMBIA

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### RESUMEN

La experiencia investigativa se desarrolló con la integración de los elementos estratégicos organizacionales, para dimensionar en torno al ciclo de gestión con enfoque socialmente responsable, su aplicabilidad en Pyme del sector servicios de la ciudad de Cali, Colombia. Por tanto, la práctica se enmarcó en lo establecido por la Guía Técnica Colombiana -GTC 180, pues se adoptaron los lineamientos y el enfoque en el ciclo PVHA, con el propósito de impactar los sistemas de gestión organizacional. A partir de esta percepción, y con la participación de sus directivos se pudo presentar propuestas estratégicas de mejoramiento, encaminadas al fortalecimiento del direccionamiento estratégico: misión, visión; así como a la verificación de acciones para implementar los programas de responsabilidad social. De esta manera, se aprecia la Responsabilidad Social como un actor integral para la gestión organizacional, la cual contribuye en la sostenibilidad de la Pyme.

**PALABRAS CLAVES:** Pymes, gestión organizacional, responsabilidad social, direccionamiento estratégico, programas de mejoramiento, gestión del cambio, riesgos asociados a un enfoque de gestión socialmente responsable, orientación hacia el desarrollo sostenible, consideraciones legales frente a la Guía Técnica Colombiana.

# THE SOCIAL ORGANIZATIONAL RESPONABILIDAD'S STEP, IMPACTED FOR THE TECHNICAL COLOMBIAN GUIDE GTC180: APPLIED CASE SMES OF THE SECTOR SERVICES AT CALI'S CITY, COLOMBIA

# ABSTRACT

The investigating experience developed with the integration of the strategic organizational elements, to dimension about the cycle of step with socially responsible focus, his applicability in SMEs' of the sector services of Cali's city, Colombia. Therefore, practice was delimited in what's established for The Technical Colombian guide - GTC 180, because adopted him guidelines and the focus in the cycle PVHA, in order to have impact on the systems of organizational step. As from this perception, and you could encounter strategic proposals of improvement with his executives' participation, led to the strengthening of the strategic addressing: Mission, vision; that way I eat the verification of actions to implement the programs of social responsibility. This way, the Social Responsibility like an integral actor for the organizational step appraises itself, which contributes in the SMEs' sostenibilidad.

JEL: L80, L84, M14

**KEYWORDS:** *SMEs*, organizational step, social responsibility, strategic addressing, programs of improvement, step of the change, correlated risks a focus of socially responsible step, orientation toward the sustainable development, legal considerations in front of The Technical Colombian guide

### INTRODUCCIÓN

La Responsabilidad Social, es un compromiso voluntario de las empresas para así contribuir al desarrollo económico sostenible de una sociedad al adoptar una actitud activa frente a los impactos que han de ser generados en el bienestar y la calidad de vida de las personas y la comunidad. Es importante reiterar que las acciones en responsabilidad social empresarial (RSE), ha sido fuertemente influenciada por la globalización exigiéndole a las empresas fundamentar sus actividades del día a día en aumentar el valor de los activos intangibles: reputación, credibilidad, confianza y transparencia. Lo anterior es ratificado por la Asociación Nacional de instituciones Financieras- ANIF (2010), en su informe sobre las Pymes, al expresar que "la crisis de la confianza creada por la falta de transparencia de algunas Corporaciones Internacionales, han promovido que la sociedad exija códigos de ética y de buen gobierno".

El tema de responsabilidad social empresarial ha tomado fuerza en Colombia, y más aún desde que en el año 2008, se estableció la Guía Técnica Colombiana - GTC 180, como herramienta de contribución a la gestión organizacional, por su enfoque en el ciclo PVHA. En nuestro país, son pocas las organizaciones que, han recurrido a la implementación de esta normatividad. Es por ello, que para los líderes de la empresa del sector servicios intervenida, decidieron integrar paralelamente a las acciones de recertificación organizacional que se adelantaban, tales como: ISO 9001/2000, ISO 14001 y la OHSAS14001 y el Código de Buen Gobierno Corporativo, el poder aplicar el ciclo de gestión con enfoque socialmente responsable; pues de esta manera, se contaría con propuestas integrales de mejoramiento frente a la responsabilidad social. Actuar con responsabilidad social trae a las Pymes beneficios a través de generar acciones hacia el interior de la organización; cuando realiza operaciones responsables con empleados y el ambiente laboral; como: forjar la participación, fomentar los procesos de desarrollo (formación, entrenamiento y capacitación), planes de beneficios extensivos a su familia, etc.

Igualmente generar acciones hacia el hacia el exterior de la organización al disponer mecanismos de dialogo y relaciones con sus grupos de interés en procura del bien común para ellos, el medio ambiente y la sociedad. En este punto, es importante destacar que el desarrollo de la investigación giro en torno a tres fases secuenciales. La primera conllevo a la identificación de aspectos significativos para el enfoque estratégico de Guía Técnica Colombiana, a través de entrevistas a los directivos de cada área, fue así como se trabajaron los lineamientos establecidos por la guía en mención, además los fundamentos de la responsabilidad social, se reflejaron en la misión, visión, valores, políticas, objetivos organizacionales, igualmente en los parámetros para identificar las partes interesadas, o stakeholders.

La segunda estableció las acciones que enmarcan el ciclo de gestión con un enfoque socialmente responsable con el propósito de constatar y desarrollar los diez pasos del PHVA. Finalmente a partir de los hallazgos en los lineamientos y las acciones del ciclo, se presentaron diferentes propuestas de mejoramiento en responsabilidad social, entre ellas se escogió una que es relevante y prioritaria, es decir la variable: comunicación estratégica; pues con ella la Pyme se encontrara en capacidad de difundir internamente y externamente todas las acciones concretas que realiza anualmente en el ámbito de la responsabilidad social con sus partes interesadas o stakeholders.

### **REVISION DE LITERATURA**

En la actualidad se escucha hablar a las empresas acerca de que deben ser responsables socialmente, ya que de no ser así traería muchos problemas al interior, al medio ambiente, y a la sociedad en general. Dando un vistazo histórico a esta temática se presenta un recuento de su evolución expresado por Torres

(2011), la responsabilidad social empresarial "ha pasado del discurso filosófico en los años sesenta a una forma de gestión empresarial, a partir de los años setenta, posteriormente a una integración del discurso socialmente responsable a la gestión de las partes interesadas o los stakeholders para los años ochenta. Pero a partir de los años noventa, deja de verse como fenómeno aislado y se evidencia como un proceso transversal a las diferentes áreas de la organización, es decir a convertirse en estrategia corporativa".

Es importante recordar que en el desarrollo de América Latina, ha existido una larga historia de acciones filantrópicas, como en la década de los años 80, que se fomentó la constitución del Centro de Promoción de la Responsabilidad Social con recursos nacionales y aportes de cooperación internacional tales como el Instituto Ethos, el cual por medio de conocimientos, intercambio de experiencias y a través de herramientas, ayuda a las empresas a examinar sus prácticas de gestión y profundizan su compromiso con la responsabilidad social empresarial como en el desarrollo sostenible. El Instituto Argentino de Responsabilidad Social quienes promueven la responsabilidad social para estimular el desarrollo sustentable trabajando conjuntamente con empresas a través de redes de información, intercambio de experiencias y colaboración recíproca; y el Centro Colombiano de Responsabilidad Social, que a través de investigación, promoción y divulgación busca agregar valor a las empresas y optimizar la gestión de las mismas, entre otros. Guía Técnica Colombiana GTC 180 (2008) establece que la responsabilidad social se constituye en un enfoque de gestión, el cual integra todos los aspectos organizacionales. Como tal, se espera que ella fortalezca los sistemas de gestión, en términos de confiabilidad, transparencia y creación de valor para todas las partes interesadas (stakeholders).

Además provee los criterios mínimos para realizar los procesos voluntarios de verificación y auditoría ética y social, mejorando sistemáticamente el desempeño social de las organizaciones; pues las recomendaciones dadas se identifican, se entienden, se gestionan e interrelacionan entre sí como un todo, de manera integral, eficiente y eficaz, en el logro de los objetivos. Esta concepción, a su vez, muestra la nueva conciencia de los múltiples factores que determinan la sostenibilidad de las organizaciones en las dimensiones económica, ambiental y social. Por lo tanto, guía sugiere adoptar el enfoque ya clásico del PHVA, como el ciclo natural de gestión, lo que permite, de manera más fácil, integrar el enfoque de responsabilidad social a todos los sistemas de gestión vigentes en cualquier organización. Más concretamente, esta guía sugiere seguir un derrotero de diez pasos a lo largo del PHVA, tanto en su componente conceptual, como en su componente práctico de gestión.

Para una empresa los diferentes sistemas de gestión (calidad, ambiental, seguridad e higiene ocupacional, entre otros) pueden integrarse conjuntamente con un enfoque socialmente responsable, dentro de un sistema de gestión único: utilizando elementos comunes e interactuando con aquellos que no lo son, lo que puede facilitar la planificación, la asignación de recursos, el establecimiento de objetivos complementarios y la evaluación de la eficacia y la eficiencia global de la organización.

Como la responsabilidad social bajo los lineamientos de la Guía Técnica Colombiana GTC 180; por tratarse de un enfoque relativamente nuevo en el medio colombiano, no se encontraron estudios previamente que la hayan abordado, con este enfoque y menos aún en el sector de servicios. Sin embargo en la revisión literaria se distinguen diversos estudios sobre la aplicación de la responsabilidad social en empresas colombianas (Hoyos, 2011; Sanín y Redondo, 2008; Rincón y Díaz, 2009; entre otros). La Fundación Universitaria Los Libertadores, en su Facultad de ciencias Administrativas, han trabajado la responsabilidad social empresarial y la competitividad de las Pymes exportadoras colombianas (2009). Todos los estudios indicados, han aportado en su debido tiempo aspectos prácticos a las organizaciones que intervinieron. Otros estudios regionales consultados fueron el estudio realizado a nivel nacional: grupo empresarial COOMEVA, entidad esta que enmarca la responsabilidad social como un elemento esencial del Movimiento Cooperativo: mutualidad, solidaridad, responsabilidad y equidad. A través de tres dimensiones: la económica donde las empresas deben ser sostenibles. El medio ambiente, visionado como la conciencia y participación en la búsqueda de soluciones a los problemas ambientales. Finalmente

la dimensión social, es decir el fundamento de las cooperativas; pues se centran en las personas y su bienestar, siendo esto último una alternativa para el desarrollo social.

### METODOLOGIA

La investigación es de corte cualitativo a partir de los planteamientos de Bonilla, (1998) quien indica que este tipo de investigación se caracteriza por "hacer una aproximación global de las situaciones sociales para explorarlas, describirlas y comprenderlas de manera inductiva". Además se enmarca en lo exploratorio y descriptivo, pues se parte de una temática poco estudiada y los resultados fueron pertinentes para la Pyme intervenida. Es de esta manera que Kotler, (2003) estable la investigación exploratoria como "la que busca obtener información preliminar que ayude a definir problemas".En consecuencia, lograr la responsabilidad social empresarial, teniendo como fundamento la gestión organizacional planteada en la Guía Técnica Colombiana GTC 180, significa de una parte, adentrarse en reconocer los lineamientos significativos de su enfoque estratégico, sin desaprovechar la indagación pertinente existente frente a la responsabilidad social: misión, visión, valores, políticas y objetivos organizacionales, las acciones a trabajar para identificar las partes interesadas o stakeholders.

Fue en esta fase donde con la activa participación de los once directivos de las áreas de la Pyme: gerencia; mercadeo y ventas; administrativa; nómina y facturación; gestión del recurso humano; contratación, financiera; compras; servicio al cliente; bienestar social y finalmente el área de informática, se realizó el diagnosticó el correspondiente estado de la empresa frente a los seis lineamientos estratégicos determinados en la Guía en mención, a saber: gestión organizacional, análisis del entorno, gestión del cambio, riesgos asociados a un enfoque de gestión socialmente responsable, orientación hacia el desarrollo sostenible y consideraciones legales. Los resultados implicaron presentar una propuesta de modificación a la misión y visión organizacional incluyendo en ellas elementos claves de la responsabilidad social. Posteriormente con la aplicación sistemática del ciclo de gestión con enfoque socialmente responsable, se permitió identificar los diez pasos del PVHA, que deben ser tenidos en cuenta para una correcta implementación de las acciones en responsabilidad social para una empresa. Finalmente a partir de las deducciones encontradas, se pudo presentar propuestas de mejoramiento a la gestión organizacional y de esta forma poder organizar programas coherentes en materia de responsabilidad social.

### RESULTADOS

Por ser la Guía Técnica Colombiana GTC 180, el parámetro de comparación a continuación se presenta la tabla 1, en donde se relacionan los lineamientos de la guía frente a los hallazgos más relevantes encontrados; es decir en donde existe un mayor impacto en el sector.

Concordante con los resultados presentados en la tabla1, se propusieron acciones de mejoramiento para trabajar en las siguientes actividades: *integrar los fundamentos* de la responsabilidad social desde los lineamientos estratégicos (misión y visión); *crear una herramienta de difusión* de las acciones que se realizan en la Pyme anualmente; *efectuar gestiones propias* para poderse adherir al pacto global, (pero una vez se certifique en todos los sistemas de gestión organizacional); *indagar ampliamente* y profundamente sobre la orientación del sector servicios para poder efectuar proyecciones globales y no puntuales como en la actualidad se realiza con sus clientes. Es decir contar con información para realizar un ejercicio de prospectiva: *ampliar el marco de proveedores* pues en algunas ocasiones no se responde oportunamente a los clientes sobre las necesidades de suministro de personal en misión.

### Tabla1: Lineamientos de la Guía Técnica vs Hallazgos encontrados

LINEAMIENTOS	HALLAZGOS
LINEAMIENIOS	Para la Pyme intervenida ha sido importante el tener establecido un
Gestión Organizacional: Se entiende como la orientación estratégica de las organizaciones socialmente responsables, la cual se refleja en los lineamientos de direccionamiento y las prácticas organizacionales que deben estar adecuadas a los valores y principios éticos. Por lo tanto se encuentran alineados a la gestión organizacional en el ámbito interno y externo para generar su transformación.	código de ética para el comportamiento de sus colaboradores, a pesar de no disponer de un programa formal de responsabilidad social. Es por ello que es relevante disponer de estrategias de comunicación para socializar actividades llevadas a cabo en materia de responsabilidad social por lo cual, es pertinente hacer énfasis en la creación de esta herramienta de difusion. Dentro de la misión y visión, no se ha establecido fundamentos de la responsabilidad social, pero en el codigo de etica ha definido sus principios y valores corporativos para así realizar un proceso de seguimiento al desarrollo y aplicación de los valores en el trabajo diario de los colaboradores. La Pyme no se encuentran adheridas al pacto global; ademas en el el ámbito interno se verifica la aceptabilidad y aplicabilidad de los
<ul> <li>Análisis del Entorno:</li> <li>La responsabilidad social supone la capacidad de la organización para responder adecuadamente a su entorno. Esto implica comprender la situación actual y perspectivas generales y particulares del sector en el cual se desempeña la organización.</li> <li>Gestión del cambio:</li> <li>Otro reto que deberían considerarse es la resistencia al cambio, en la cultura dentro de las organizaciones, cuando se comienza un proceso de responsabilidad social. Los medios básicos con los que se cuenta para una comunicación dinámica, transparente y sin ambigüedades, además de facilitar el cambio efectivo de información permanente, son toma de conciencia y enfoques de entrenamiento.</li> </ul>	aniolio inteno se verifica la aceptaolidad y anicabilidad de los principios y valores, a través de procesos de consenso entre los integrantes de la organización; pero en el ámbito externo se han identificado sus Stakeholders. A partir de las acciones en gestión organizacional se han identificado las oportunidades y amenazas que le afectar; dentro de las oportunidades se resaltan condiciones crediticias favorables para los inversionistas. Pero las particularidades del sector no las integra a las decisiones organizacionales porque sus líderes no participan en las mesas sectoriales. La Pyme se encuentra en un proceso de reestructuración, realiza los procesos de certificación: calidad, salud ocupacional, medio ambiental. En materia de responsabilidad social está en proceso de diálogo con sus partes interesadas; Cabe resaltar que hoy en día las empresas están participando en los sistema de gestión organizacional, donde sus colaboradores son participes, generando así comportamientos de compromiso de sus colaboradores. En la Pyme se notan falencias en la determinación de cláusulas de alineación de RSE para sus proveedores, por otro lado no se ha adoptado realizar la presentación de triple cuenta de resultados, los DDHH se han tenido en cuenta en los sistemas de auditoría/control interno, y se aseguran que sus colaboradores reciban los contratos de trabajo antes de empezar a trabajar y que estos mismos sean entendidos por ellos. Proporciona información de factores sociodemográficos de la fuerza laboral para reforzar programas de desarrollo personal; y por último se han llevado a cabo proyectos
<b>Riesgos asociados a un enfoque de gestión socialmente</b> <b>responsable:</b> Es importante hacer un ejercicio gerencial de identificar, valorar y gestionar los riesgos asociados a la implementación de un enfoque integral y estratégico de responsabilidad social. Un enfoque de responsabilidad social debe estar en concordancia con una gestión integral del riesgo en la organizaciones y adicionalmente, debe considerar los riesgos propios, es decir, aquellos inherentes a su formulación e implementación.	sociales de modo que beneficien a las minorías. La empresa han optado por implementar medidas en el comportamiento de los colaboradores de la organización en momentos donde se presente conflictos al interior de la organización delegando a líderes de procesos: jefes, gestión humana para la solución de conflictos. Igualmente han tomado medidas de gestión y funcionamiento que estimen convenientes en riesgos asociados a la reputación, comercio justo, competencia leal, ética en los negocios, mercadeo responsable, relaciones con la comunidad, viabilidad operacional y la calidad de vida laboral con el fin de identificar estas acciones y si es necesario tomar medidas correctivas y de mejora.
<b>Orientación hacia el desarrollo sostenible:</b> El desarrollo sostenible debería constituirse en un objetivo estratégico de las organizaciones que quieran ser socialmente responsables. Este enfoque busca garantizar el equilibrio entre el crecimiento económico, la elevación de la calidad de vida y el bienestar social, protegiendo los recursos naturales en que se sustentan estos procesos y asegurando los derechos de las futuras generaciones a un ambiente sano.	La Pyme se preocupa por participar en foros que hablen sobre el medio ambiente y de igual forma interactúa con diferentes grupos sociales en la búsqueda de soluciones sostenibles en el sector que opera; se analiza la cadena de proveedores en el mapa de riesgos, oportunidad e impactos. No tienen establecidos indicadores de gestión concordantes con el informe de sostenibilidad
<b>Consideraciones legales:</b> Los aspectos legales constituyen los acuerdos básicos que la sociedad pide a sus ciudadanos, los cuales suponen a su vez unos principios éticos que lo soportan, como son la justicia, la equidad, la confianza, y el bien común. Esos principios, a su vez, se basan en la dignidad inalienable de las personas, fundamento del estado social de derecho y de los derechos fundamentales (personales, familiares, sociales y culturales) que éste garantiza a los ciudadanos.	Esta empresa en su código de ética identifica los principios y valores. Igualmente ha adoptado medidas y planes de acción para respetar la dignidad humana y derechos humanos frente a la calidad de vida laboral desarrollada.

Fuente: elaboración propio, soportada en los lineamientos de la guía Técnica Colombiana GTC 180.

A continuación se presenta la propuesta presentada sobre el mejoramiento de la misión, y visión organizacional, en donde en ellas se integraran los elementos favorables a la responsabilidad social, la tabla 2 se indican dicha propuesta.

Tabla 2: propuesta de misión y visión organizacional, con aspectos sobre la responsabilidad social. Fuente: elaboración propia, con base en indagaciones organizacionales y sugerencias de los directivos de las áreas de la Pymes.

Como la segunda fase de la investigación fue la aplicación del ciclo PHVA de gestión con un enfoque socialmente responsable, para cada una de las restantes cuatro falencias detectadas en la tabla 1: lineamientos de la Guía Técnica vs Hallazgos encontrados. Se les aplicó a cada una de las falencias los diez pasos que conforman el ciclo de gestión con un enfoque socialmente responsable. La figura 1, detalla cada uno de los diez pasos que integra los pasos correspondientes al ciclo en mención. Además fue necesario para una mayor comprensión, presentar una descripción de referencia para cada una de las acciones (planear, hacer, verificar y actuar), las cuales se deben realizar para poder obtener resultados. A continuación se detallan: Planear (P). Consiste en establecer la manera, camino o el método para alcanzar las metas propuestas; este componente a su vez lo integran las partes interesadas, el diagnóstico, plan de acción y plan de comunicaciones. Donde las partes interesadas: de las organizaciones deben buscar relaciones que ambos se beneficien, además tener en cuenta las expectativas, para así realizar los procesos de diálogo. El diagnóstico, tanto interno como externo se debe realizar para poder formalizar una planeación estratégica y operativa socialmente responsable, pues así se crear valor. El plan de acción, hace referencia a lo que la empresa quiere realizar tanto en su componente estratégico como operacional de la organización con sus partes interesadas para así dar cumplimiento al objetivo enmarcado por la organización. Plan de comunicaciones, en el cual se hace referencia a lo que pretende comunicar la organización a las partes interesadas tanto internas como externas para dar cumplimiento al objetivo de la organización.

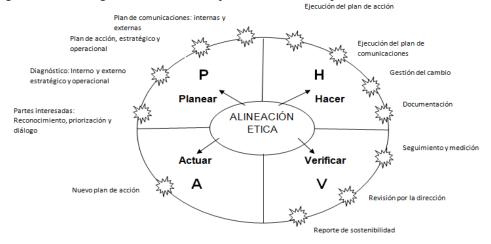


Figura1: Ciclo de gestión con un enfoque socialmente responsable

*Hacer (H).* Es la manera en cómo se van a efectuar las tareas ya planeadas. Este componente a su vez lo integra la ejecución del plan de acción, ejecución plan de comunicaciones, gestión del cambio, y documentación. *Ejecución plan de acción*, en donde se utiliza un cronograma de actividades, en el cual se desglosa cada tarea haciendo referencia al día que se ejecutará cada actividad y el responsable del cumplimiento de ella. *Ejecución plan de comunicaciones*, en este paso se utiliza un cronograma de actividades, en el cual se desglosa la tarea a realizar pero se indica además el medio de comunicación a utilizar en su difusión, siendo necesario indicar la posible fecha de cumplimiento como el nombre del responsable de ello. *Gestión del cambio*. Este paso es de impacto, pues en él se indica el cambio de una situación actual a una situación deseada. Generalmente en este paso se proponen desarrollar nuevas

Fuente: Guía técnica Colombiana GTC 180 p. 8

tecnologías o aspectos de cambio en el sistema cultural, por ser compleja esta acción es necesaria una sensibilización previa por las personas para no generar mayores costos en la implementación. *Documentación*. Por tratarse de evidenciar las acciones en el hacer, es necesario que los procedimientos se encuentren definidos claramente con el propósito de verificar el cumplimiento, es decir evidenciar lo planeado frente al cumplimiento. Para ello, se pueden presentar informes consolidados de lo cumplido o de los ítems que deben ser modificados.

Tabla 3: aplicación del ciclo PHVA, para crear estrategias de comunicación.

ETAPAS	COMPONENTES	APLICACIÓN
	Partes interesadas	Las partes interesadas a nivel externo las conforman las empresas y los proveedores a quienes se pretende difundir las estrategias de comunicación, a nivel interno son los trabajares propios de la empresa como de los trabajadores en misión, quienes contribuyen al desarrollo de la responsabilidad social.
	Diagnostico	Se detectaron falencias al no tener conocimiento sobre la satisfacción del personal en misión en las diferentes organizaciones que lo requieren, en el aspecto de las oportunidades se encontró avances en las acciones de responsabilidad social, como la instauración del código de ética. En las fortalezas se encontró convenios empresariales, ofertas de valor agregado y el respaldo de las cajas de compensación para fortalecer programas al personal. Por ultimo dentro de las amenazas se detectaron modificación a la normatividad legal exigida por el gobierno. Demora en la oportuna consecución del personal solicitado.
	Plan de acción	El plan estratégico dirigido a las partes interesadas externas se cubrirá con reuniones informativas a través de desayunos de trabajo en las diferentes ciudades, además se presentaran informes trimestrales sobre los impactos que han tenido en responsabilidad social y el plan de acción operacional va dirigido a las partes interesadas al interior de la Pyme, se realizarán jornadas recreativas por medio de capacitaciones, para darle a conocer los impactos que trae el incursionar , todo ello se complementara con una encuesta de satisfacción del personal A nivel externo con las empresas a través de los informes que estos presenten sobre los avances que ha tenido al incursionar en responsabilidad social empresarial, serán difundidos en medios de comunicación como prensa, blogs en internet, pagina web, televisión en canales regionales para que la comunidad tenga conocimiento de los que realiza la empresa. A nivel interno con los trabajadores propios y en misión se enviarán informes, boletines a través de internet, correos electrónicos para que estos conozcan
Planear	Plan de comunicaciones	los avances.

*Verificar (V).* Se compara la ejecución es decir el hacer, con el resultado obtenido con la meta planificada. Este componente a su vez lo integra el seguimiento y medición, revisión por la dirección, y reporte de sostenibilidad. *Seguimiento y medición*, para su cumplimiento se deben establecer métodos de manera que se pueda dar seguimiento de lo que se ha cumplido e igualmente de esta manera detectar falencias y tomar medidas correctivas. *Revisión por la dirección*, la alta dirección debe evaluar oportunidades de mejora y la necesidad de efectuar cambios si los cree conveniente para la organización, de acuerdo a sus políticas y objetivos para mejorar sus resultados. *Reporte de sostenibilidad*, En él se debe proporcionar información que responda a las necesidades de las partes interesadas, también debe incluir quejas, sugerencias, reclamaciones por parte de los stakeholders. Debe incluir la política de responsabilidad social y las razones por las cuales la organización está comprometida con este enfoque. *Actuar (A):* En esta etapa es donde se detectan desvíos y se procederá actuar de modo que el problema no se vuelva a precentar. Este componente a su vez lo integra *al muevo plan da acción*, el cual parte de los

se vuelva a presentar. Este componente a su vez lo integra *el nuevo plan de acción*, el cual parte de los resultados al seguimiento y medición del impacto, al igual que las decisiones tomadas por la dirección, la

organización periódicamente debe revisar y realizar ajuste a los planes de acción propuestos. Como un ejemplo se presenta las acciones realizadas para la falencia: crear una herramienta de difusión de las acciones que realiza la Pyme anualmente, ver tabla 3.

Tabla 3 continua

ETAPAS	COMPONENTES	APLICACIÓN
	Ejecución del plan de acción Ejecución del plan de comunicaciones	En un cronograma de actividades se detalla cada una de las tareas a realizar para el cumplimiento del plan de acción tanto estratégico como operacional, con su respectiva fecha y responsable del cumplimiento de la tarea. Igualmente en un cronograma de actividades se detalla cada una de las tares para el cumplimiento del plan de comunicación, teniendo en cuenta el detalle de los medio de comunicación requeridos para divulgar las estrategias de comunicación
	Gestión del Cambio	Realizar esquemas de trabajo tanto a nivel operacional como de responsabilidad social para sí mantener el recurso operacional y a su vez enfocarse en la retribución de procesos fructíferos al ejecutar la responsabilidad social. Igualmente incentivar a los directivos del área a proyectar dentro tos de los diferentes niveles organizacionales en mensaje de responsabilidad social como un concepto de sostenibilidad del negocio a los trabajadores.
Hacer	Documentación	Implementar políticas de declaración de la responsabilidad social ,igualmente documentar los avances que se han dado con los procesos de dialogo en las partes interesadas; como también realizar reportes de sostenibilidad Para dar cumplimiento al objetivo se deben realizar procesos de seguimiento y medición a través de
	Seguimiento y medición	indicadores, encuestas que midan la satisfacción de las partes interesadas al implantar las estrategias de comunicación. La gerencia debe revisar el cumplimiento de esta estrategia y documentar de igual manera los avances encontrados y
	Revisión por la dirección	las falencias para tomar medidas correctivas y de mejoramiento. En él se detalla las acciones realizadas en inversiones frente a las dimensiones de la responsabilidad social: económica, medio ambiental y social de la Pyme e igualmente los
Verificar	Reporte de sostenibilidad	indicadores cumplidos anualmente en este tema tan relevante a la empresa. Una vez ejecutado el plan de acción propuesto para la difusión de la comunicación, se debe verificar su cumplimiento y si no se ha cumplido o ha presentado
Actuar	Nuevo plan de acción	problemas se debe implementar un nuevo plan de acción con las respectivas mejoras a realizar

Fuente: elaboración propia baso en los pasos del ciclo de gestión

### CONCLUSIONES

La Pyme en busca de mejorar constantemente su servicio ha efectuado acciones de recertificación de la gestión de calidad ISO 90001:2008, igualmente en frente a la ISO 14001, y OHSAS 18001, pues en el año 2009 se les otorgo su certificación, es por ello que paralelamente los lineamientos estratégicos de la Guía Técnica Colombiana GTC 180 se pudieron implementar con facilidad, llevando esto a un mejoramiento continuo de ella. Además abonar terreno para profundizar en acciones sobre la responsabilidad social, entre ellas el poderse adherir al pacto global y realizar un informe de sostenibilidad aprovechando los indicadores del GRI.

Vale la pena resaltar que el ciclo de gestión con un enfoque socialmente responsable, propuesto por la guía técnica Colombiana (GTC 180), permitió de manera fácil integrar dicho enfoque a las falencias detectadas. Además se puede utilizar como una herramienta de difusión al aplicar los diez pasos del ciclo de gestión y de esta forma la Pyme pueda establecer acciones o programas en materia de responsabilidad social Como los clientes son un grupo de interés fundamental para la Pyme el ciclo de gestión con

enfoque socialmente responsable, contribuyó a la actualización, seguimiento y control del proceso de servicio al cliente llevado a cabo.; pues así se obtuvo información más real de los clientes, de su satisfacción para poder realizar acciones al trabajar clientes potenciales. Además el disponer de una misión, visión, principios y valores coherentes con los fundamentos de la responsabilidad social proporcionan lineamientos para llevar a cabo un proceso de seguimiento al desarrollo y aplicación de los programas en responsabilidad social que se implemente en el trabajo del día a día.

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# FACTORES CLAVES QUE INFLUYEN EN EL PROCESO DE SUCESIÓN EN LAS EMPRESAS FAMILIARES DEL SECTOR TEXTIL EN TIJUANA, B.C., MÉXICO

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# RESUMEN

El presente trabajo contempla una investigación sobre las empresas familiares del sector textil en Tijuana, B.C. México, abordando el tema de los factores claves que influyen en el proceso de la sucesión. Las empresas familiares constituyen el grueso de las pequeñas y medianas empresas que aportan tanto en empleo e ingresos en la economía mexicana. El objetivo del presente trabajo es conocer el mecanismo de sucesión de los propietarios de empresas familiares del sector textil en la ciudad de Tijuana, B.C. Muchas de las empresas familiares no cuentan con planes de sucesión y desconocen la utilidad de los mismos para el futuro de sus empresas, sin embargo, el dueño desea que uno de sus familiares directos asuma la dirección de la empresa cuando se retire. Asimismo, el nombrar a un sucesor puede generar conflictos familiares. Para lograr los resultados se han realizado 43 encuestas representativas a los propietarios afiliados al padrón de la Cámara Nacional de la Industria de Transformación (CANACINTRA) delegación Tijuana, en Baja California.

Palabras claves: empresa familiar, proceso de sucesión, sector textil.

# KEY FACTORS AFFECTING SUCCESSION PROCESS IN FAMILY FIRMS IN THE TEXTILE SECTOR IN TIJUANA, BAJA CALIFORNIA, MEXICO

# ABSTRACT

This work includes research on family businesses in the textile sector in Tijuana, Baja California, Mexico, addressing the issue of the key factors that influence the succession process. Family businesses constitute the majority of small and medium enterprises that provide both employment and income in the Mexican economy. The aim of this study was to determine the mechanism of succession of owners of family businesses in the textile sector in the city of Tijuana, Baja California. Many family businesses have no succession plans and unaware of their usefulness for the future of their companies, however, the owner would like one of their family members assume the management of the company when he retires. Also, name a successor can generate family conflicts. To achieve the results have been conducted 43 surveys to the owners, members of The National Chamber of the Transformation Industry (CANACINTRA, by its acronym in Spanish) Delegation Tijuana.

Keywords: family business, succession process, textile sector.

# INTRODUCCIÓN

Las empresas familiares son organizaciones económicas que se forman para generar empleo e ingresos para sostener la familia, casi siempre son empresas micro y pequeñas desde la perspectiva de generación de empleo. Sin embargo, muchas tienden a crecer y tener éxito en base a una planificación de largo plazo,

al adecuado ambiente familiar, a la responsabilidad social, a la calidad de la producción, a la innovación y a la competitividad de la empresa.

Las empresas familiares exitosas son aquellas que logran el balance entre la empresa y la familia. Su éxito se atribuye principalmente a dos factores: el compromiso de los miembros de la familia y su visión a largo plazo. Por tratarse del patrimonio familiar los encargados de su administración tienen muy claro que este debe perdurar por generaciones, y por tanto, sus acciones y estrategias están orientadas a buscar el crecimiento sostenido. (Shum, 2008)

Los factores claves para alcanzar la competitividad en una empresa familiar son las estrategias competitivas ya que son una parte fundamental, debido a que los mercados son cada vez más competitivos y exigentes. En el mundo global, las organizaciones empresariales han encontrado que la velocidad en la que crece la competencia es cada vez mayor, asumir conscientemente esta situación permite que las empresas establezcan planes e iniciativas que produzcan resultados y mejoramientos competitivos.

Asimismo, las estrategias competitivas pueden tomarse como un enfoque sistemático hacia una responsabilidad mayor y cada vez más importante de la estrategia general de la empresa familiar, es decir, relacionar a la empresa con su entorno estableciendo su posición, de tal manera que garantice su éxito continuo y la proteja de cualquier contingencia que se pueda presentar. La implementación o no de una estrategia competitiva puede determinar en el futuro el nivel de competitividad de la misma y su desempeño en el mercado. No obstante, para la implementación de esta estrategia se debe contar con el apoyo de los propietarios de la empresa y tener la accesibilidad y disponibilidad del personal para lograr las metas que persigue la empresa familiar.

Definir al futuro sucesor en la empresa familiar es determinante para garantizar la continuidad de la empresa; tiene que actuarse bajo la lógica empresarial, lo cual no siempre coincide con los privilegios de la lógica familiar. La dirección de la empresa basada en jerarquías familiares, puede afectar a la empresa e impedir su crecimiento e incluso su mantenimiento en el tiempo. Por ello, el propietario debe tener un plan de sucesión que garantice el futuro y la expansión de la empresa en un ambiente cada más competitivo.

El fenómeno de la sucesión se inicia desde el punto de vista práctico, desde el momento de la concepción de los hijos fundadores, por lo regular es un proceso largo que, si se planifica, durará de 10 a 15 años y pasará por varias etapas. (Belausteguigoitia, 2012)

El objetivo del presente trabajo de investigación es determinar los factores claves para alcanzar la competitividad que influyen en el proceso de sucesión en las empresas familiares del sector textil

# REVISIÓN LITERARIA

### La empresa familiar y sus características

Existe una gran cantidad de definiciones de la empresa familiar, Belausteguigoitia (2012), la define como una organización controlada y operada por los miembros de la familia. Asimismo (Amarjen, 2009) la define como aquella en la que la propiedad y gestión de la empresa están en las mismas manos, y cuya actividad de desarrolla con una clara vocación de expansión y continuidad por parte de los mismos miembros de la empresa. Una empresa familiar es aquélla empresa en la que el capital y, en su caso, la gestión y/o el gobierno están en manos de una o más familias, que tienen la capacidad de ejercer sobre ella una influencia suficiente para controlarla, y cuya visión estratégica incluye el propósito de darle continuidad en manos de la siguiente generación familiar. (Sánchez-Crespo, 2006).

De acuerdo a Eddy (1996) las principales características que presentan las empresas familiares son: la familia tiene cierta propiedad o propiedades, la familia tiene un alto control dentro de la dirección de la empresa y hacer negocios es el principal ideal de la familia. Para Rosenblatt et. al (1985), las empresas familiares son cualquier negocio en el cual la mayoría de la propiedad y del control se encuentran en manos de una familia y en el que, dos o más miembros familiares están implicados en los negocios de la empresa. Los autores como Donnelley (1964), indica que las empresas familiares son aquéllas que se identifican con al menos dos generaciones de la familia y donde ese vínculo conlleva a una influencia en la compañía de los intereses y objetivos de la familia.

La definición de empresa familiar puede abarcar multitud de características, sin embargo pueden distinguirse tres rasgos que deben estar presentes cuando se hace referencia a este tipo de organizaciones: a) la transferencia del negocio a través de distintas generaciones; b) la propiedad y dirección mayoritariamente en manos de una familia; c) la implicación de dicha familia en todo lo concerniente a la firma. Esta caracterización de la empresa familiar permite diferenciar con las otras formas de organización de las demás empresas. En primer lugar, habría que mencionar la existencia de varios subsistemas que engloban a un sistema común que es la empresa. Aquí se incluye el subsistema empresa, el subsistema familia y el subsistema propiedad y, la forma en que éstos, en la medida en que estén presentes en la compañía, van a influir en la firma de una u otra manera.

El modelo de los tres círculos (Davis y Tagiuri, 1982), es uno de los que han sido más empleados para describir distintas situaciones actuales y futuras de las empresas familiares. En este modelo cada círculo representa un grupo de personas, con características particulares en relación a la empresa familiar; las intersecciones de los círculos constituyen los grupos de personas que poseen dos o tres de las características identificadas por el modelo. Según coincidan -en mayor o menor grado- los tres círculos, es decir, cuando estas se superpongan como atraídas por una fuerza centrípeta (algo que suele ocurrir en primera y segunda generación) o se distancien como separados por una fuerza centrífuga, (como acostumbra a pasar en empresas familiares de gran tamaño) se estará frente a distintos tipos de empresas familiares, con características muy diferentes: por el número de protagonistas que en ellas trabajan o con ellas tienen relación, por los distintos roles que desempeñan y sus diferentes intereses, así como por el contenido de las relaciones y actitudes que entre unas y otras personas se dan.

Sobre este tema son muy importantes los estudios realizados por Davis y Tagiuri (1982) con el "Modelo de los tres círculos", el cual ha sido objeto de mención en trabajos posteriores (Leach, 1993; Gersick y Davis, 1997). Otra característica que destaca en estas empresas es la cultura, o dicho en otras palabras, los valores, actitudes y creencias propias de una familia que mayoritariamente dirige y controla la empresa en cuestión. Por último, hay que considerar otro aspecto significativo que es la visión a largo plazo que este tipo de negocios plantea y que es fruto de numerosas disparidades con las empresas no familiares. Estudios como los realizados por Daily y Dollinger (1993) o Donckels y Fröhlich (1991) demuestran esa afinidad a la continuidad a lo largo de las generaciones, la cual implica uno de los problemas más importantes tratados a través de los años como es la sucesión, puesto que aun existiendo esa visión a largo plazo muchas empresas no logran superar el cambio de generación.

Una vez conocidos los rasgos más distintivos de este tipo de negocios, a continuación se analizaran los retos que debe afrontar el gerente-propietario de una empresa familiar comenzando, en primer lugar, con una de las particularidades de estos negocios, la confluencia de varios subsistemas que interactúan en un sistema común, lo cual conduce hacia uno de los conflictos que deben hacer frente como es la confusión de los patrimonios, familiar y empresarial.

### Proceso de Sucesión en la Empresa Familiar

De acuerdo con Belausteguigoitia (2012), el proceso de sucesión es muy complejo, en el cual participa una gran cantidad de actores. Por lo general, es un proceso largo que, si se planifica durará de 10 a 15 años y pasará por varias etapas. En ocasiones las situaciones imprevistas originan que este proceso sea más corto, como en el caso del fallecimiento de los duennos y directores o las desavenencias entre familiares e incluso la ruptura de las relaciones entre ellos.

La construcción de un plan de sucesión puede ser definida de diferentes maneras, se puede iniciar con la definición operacional y sus propósitos. Se define la planeación de la sucesión como un proceso estructurado en el cual se involucran la identificación y preparación del sucesor, para asignarle un rol dentro de la organización, esto ocurre cuando el perfil es cubierto. (Garman & Tyler, 2004). Por lo tanto Lo que da el carácter de empresa familiar a una organización es el hecho de considerar a la empresa como un logro personal que el fundador desea trasladar a la familia y perpetuar a través del tiempo (Gallo, 2008)

Es en este momento donde se deben de tomar en cuenta los factores claves para alcanzar la competitividad en una empresa familiar como estrategias competitivas que influyen en el proceso de sucesión de las empresas familiares tales como: actitudes de los propietarios en donde el estilo de liderazgo, el consejo de familia y perfil del sucesor; así como los conflictos intergrupales intervienen el contexto familiar, planificación del proceso de sucesión y el desarrollo de personal, siendo estos factores claves en el proceso de sucesión.

# METODOLOGÍA

Para el presente trabajo se eligió una muestra de 43 propietarios de las empresas familiares del sector textil afiliados al padrón de la Cámara Nacional de la Industria de Transformación (CANACINTRA) delegación Tijuana, en Baja California.

A los propietarios se les aplicó un cuestionario titulado conformado con 75 preguntas relacionadas al tema de estudio. Una vez recopilada la información de los cuestionarios se procedió a la elaboración de una de base de datos en SPSS y posteriormente se procedió a la captura de la información para luego realizar el respectivo análisis para su interpretación.

Se utilizó una escala de medición con una escala de lickert. Se elaboraron los cuadros y gráficos que nos permite un análisis de la situación actual de la sucesión en las empresas del sector textil. Con dicha información se pretende saber si el gerente propietario ha postergado o desechado la idea de realizar un plan de sucesión familiar.

### Objetivo General

Determinar los factores claves que influyen en el proceso de sucesión de las empresas familiares del Sector Textil en Tijuana, B.C., México

### Objetivos específicos

Determinar si las actitudes de los propietarios es un factor clave en el proceso de sucesión a través del estilo de liderazgo, consejo de familia y el perfil del propietario en las empresas familiares del sector textil.

Determinar si los conflictos intergrupales de los propietarios es un factor clave en el proceso de sucesión, contexto familiar y el desarrollo del personal en las empresas familiares del Sector Textil

### Determinación de la Muestra

Para el presente trabajo se eligió una muestra de 43 propietarios de empresas familiares del sector textil de la Cámara Nacional de la Industria de Transformación (CANACINTRA) delegación Tijuana, en Baja California.

Factores que se consideraron en el cálculo de la muestra:

- a) La población se considera con características homogéneas.
- b) Se cuenta con una población finita, ya que el número de empresas familiares es conocido.
- c) Fórmula empleada para el cálculo de la muestra:

$$n = \frac{\partial^2 pq}{e^2 (N-1)\partial^2 pq}$$
(1)

### Tabla 1: Total de empresas según CANACINTRA, Marzo 2011

	Poblacion	Muestra
Total de empresas fabricantes de prendas		
de vestir	43	33

Esta tabla muestra que el total de las empresas encuestas si cuenta con un nivel de confiabilidad

### Validación del Instrumento

A los propietarios se les aplicó un cuestionario conformado con 75 preguntas, el cual fue validado relacionado al tema de estudio. Se utilizó una escala de medición con categorías de respuestas de opción múltiple. Se elaboraron los cuadros que permiten un análisis de la sucesión en las empresas familiares, así como de las estrategias de competitividad. Con dicha información, se pretende saber si el propietario ha postergado o desechado la idea de realizar un plan de sucesión familiar y si cuenta con estrategias competitivas en su empresa. La validez del cuestionario se determinó mediante el coeficiente de confiabilidad de Alfa-Cronbach, por medio del programa SPSS: el resultado arrojado por dicho programa fue de .80, un grado de confiabilidad aceptable (ya que esta por arriba .60 y de 0.70, puntuación mínima aceptable.).

Tabla 2: Análisis factorial confirmatorio.

Variable	Dimensión	Alfha Normal	Alfha Estandar	
	Competitividad	0.70	0.70	
Competitividad sistémica	Tecnología	0.60	0.60	
	Rentabilidad	0.70	0.70	
	Proceso de sucesión	0.80	0.80	
Conflictos intergrupales	Contexto familiar	0.80	0.80	
	Desarrollo de personal	0.80	0.80	
Actitudes propietarios	Consejo de familia	0.80	0.80	
	Estilos de liderazgo	0.80	0.90	
	Formación del propietario	0.80	0.80	
Clima organizacional	Gestión	0.70	0.80	
-	Supervisión	0.90	0.90	
	Esfuerzo	0.90	0.90	

Esta tabla muestra los resultados del análisis confirmatorio efectuado para validar el instrumento de medición utilizado en la investigación.

### Tabla 3: Análisis de Fiabilidad

Alfa de Cronbach	No. de elementos	
.736	43	

En la tabla se muestra la validez del cuestionario se determinó mediante el coeficiente de confiabilidad de Alfa-Cronbach, por medio del programa SPSS: el resultado arrojado por dicho programa fue de .736, un grado de confiabilidad aceptable (ya que esta por arriba 0.60 y de 0.70, puntuación mínima aceptable.). Fuente: elaboración propias con datos del spss (2012)

### RESULTADOS

#### Situación actual de las empresas familiares del sector textil.

En Tijuana, B.C. las empresas familiares del sector textil actualmente se encuentran en proceso alto de desarrollo, dado que los propietarios de la empresas manifiestan en un que han aumentado sus ventas y tienen compromisos adquiridos en mediano plazo para seguir abasteciendo a sus clientes potenciales.

Tabla 4: Apreciación del propietario sobre el proceso de desarrollo.

Opinión de los propietarios	Porcentaje
Alto desarrollo	40%
Mediano desarrollo	25%
Bajo desarrollo	20%
Ningún desarrollo	15%
Total	100%

Esta tabla presenta los resultados de la apreciación del propietario en cuanto a que el proceso de desarrollo de las empresas familiares del sector textil es alto.

Los propietarios de las empresas familiares manifiestan que se ha presentado un incremento en las ventas de un 50% al contar con un mayor número de clientes dando como resultado el que se tengan compromisos a mediano plazo para seguir abasteciendo a sus clientes.

Tabla 5: Incremento en las ventas de las empresas familiares del sector textil.

Opinión de los propietarios	Porcentaje
Ventas	50%
Distribución	25%
Exportación	15%
Otros	10%
Total	100%

Esta tabla presenta los resultados del incremento de las ventas de las empresas familiares del sector textil.

El proceso de desarrollo se refleja en la inversión de tecnología para maquinas de coser industriales y sistemas automatizados de control de calidad para corregir en línea cualquier defecto que presente la tela, con la finalidad de hacer más eficientes los procesos de producción a futuro y cumplir con los compromisos adquiridos con los clientes potenciales.

### Participación de la familia en la administración del negocio y su continuidad después del fundador.

Es muy limitada la participación de la familia política en la administración de la empresa familiar, sólo esta se realiza en un 35% de las empresas encuestadas siendo la mayor participación de los yernos o

algunos primos que trabajan más como empleados familiares, ocupando puestos como: jefes de los departamentos de ventas, producción y compra de materias primas.

Tabla 6: Inversión realizada por los propietarios de las empresas del sector textil.

Opinión de los propietarios	Porcentaje
Tecnología	30%
Materia Prima	25%
Capacitación	20%
Diseños de moda	25%
Total	100%

Esta tabla presenta los resultados de la inversión que están realizando los propietarios de las empresas del sector textil, reflejándose está en la tecnología para hacer más eficientes los procesos de producción a futuro.

Tabla 7: Participa	ación de la	familia n	olítica en la	administración	del negocio
Tuola 7. Turticip	ucion de la	rannia p		administracion	der negoeio.

Opinión de los propietarios	Porcentaje
Totalmente de acuerdo	35%
Medianamente de acuerdo	0%
Parcialmente en desacuerdo	0%
Totalmente en desacuerdo	65%
Total	100%

Esta tabla presenta el resultado de la participación de la familia política en las empresas del sector textil, siendo muy baja la participación en la administración del negocio.

La participación de la familia en las empresas de este sector está concentrada principalmente en la esposa (o), representando el 55 % de las compañías encuestadas, seguido por los hijos (as), ocupando los puestos claves como: la Gerencia General, Contabilidad, Finanzas y Recursos Humanos.

Tabla 8: Participación de la familia en la administración del negocio.

Opinión de los propietarios	Porcentaje
Esposa (o)	55%
Hija (o)	25%
Nieta (a)	15%
Hermana (o)	5%
Total	100%

Esta tabla presenta el resultado de la participación de la familia en las empresas familiares del sector textil, siendo la esposa (o) la de mayor participación en la administración del negocio.

En la administración de la empresa familiar existe el deseo de algún hijo(a) de participar en la continuidad y el desarrollo de la empresa cuando el propietario se retire o fallezca, siendo un 55% el que espera quedarse al frente del negocio familiar cuando el propietario se retire.

Opinión de los propietarios	Porcentaje	
Esposa (o)	25%	
Hija (o)	55%	
Hermano (a)	15%	
Otros(as)	5%	
Total	100%	

Tabla 9: Deseo de algún miembro de la familia de participar en la administración del negocio.

Esta tabla presenta el resultado del deseo de algún miembro de la familia en participar en la administración del negocio después de que el propietario se retire o fallezca.

De acuerdo a las encuestas realizadas el 70% de los propietarios de las empresas familiares si ha pensado en que si fallece, alguno de sus hijos puede dirigir el negocio; solo que estos no llevan a cabo un plan de sucesión familiar o no cuentan con ningún documento que refleje la decisión de cuál de sus hijos llegado el momento puede ser el sucesor o el que dirija el negocio.

Tabla 10: El propietario ha pensado que alguno de sus hijos puede dirigir el negocio.

Opinión de los propietarios	Porcentaje
Totalmente de acuerdo	70%
Medianamente de acuerdo	0%
Parcialmente en desacuerdo	0%
Totalmente en desacuerdo	30%
Total	100%

Esta tabla presenta el resultado de lo que piensa el propietario acerca de que si alguno de sus hijos puede dirigir el negocio.

Asimismo, el 53% de propietarios considera que si hoy fallece, la empresa tendrá problemas en su operación ya que no está designado un sucesor de manera oficial y en lo que se designa a uno la empresa puede paralizarse, estancarse en su desarrollo o incluso llegar a la quiebra.

Tabla 11: La empresa tendrá problemas en su operación al fallecer el propietario.

Opinión de los propietarios	Porcentaje	
Totalmente de acuerdo	53%	
Medianamente de acuerdo	0%	
Parcialmente en desacuerdo	0%	
Totalmente en desacuerdo	47%	

Esta tabla representa el resultado de que si la empresa tendrá problemas en su operación al fallecer el propietario.

### Sucesión y conflictos en la familia.

Los conflictos en la familia derivados por la rivalidad existente entre sus miembros no afecta al 61% de los encuestados, lo que garantiza que el futuro de la empresa; en este caso ya depende de las decisiones del propietario al designar el sucesor de la empresa.

Llama la atención que el 70% de los propietarios de las empresas familiares todavía no tiene definido la distribución de bienes entre sus hijos o esposa, lo que indica que no existe un testamento; lo cual resulta alarmante ya que esto indica que a futuro existirán problemas legales por determinar quien es el sucesor en la empresa y como se realizará la distribución de los bienes.

Tabla 12: Rivalidad	entre los	miembros o	de la	familia.
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Opinión de los propietarios	Porcentaje
Totalmente de acuerdo	39%
Medianamente de acuerdo	0%
Parcialmente en desacuerdo	0%
Totalmente en desacuerdo	61%

Esta tabla presenta el resultado obtenido acerca de que si existe rivalidad entre los miembros de la familia y si los conflictos derivados de esta situación afectan a la empresa.

De acuerdo con los resultados obtenidos se corrobora que si el propietario toma la decisión de nombrar un sucesor no generaría conflictos familiares en el 54% de los encuestados. Sin embargo, un considerable 46% de los propietarios creen que al nombrar un sucesor tendrán conflictos por las rivalidades que existen entre los miembros de la familia y sus hijos, e incluso el temor inherente a que si al nombrar al sucesor la compañía fracase o que exista una ruptura entre la familia y esto lleve a que la empresa no crezca o incluso que se vaya a la quiebra. Por tanto, muchos de los propietarios de las empresas familiares del sector textil posponen la realización de un plan de sucesión motivadas a la consecuencia de una posible desintegración familiar por conflictos en la empresa.

Tabla 13: Conflictos al nombrar al sucesor

Opinión de los propietarios	Porcentaje
Totalmente de acuerdo	46%
Medianamente de acuerdo	0%
Parcialmente en desacuerdo	0%
Totalmente en desacuerdo	54%

Esta tabla presenta el resultado obtenido acerca de si se general conflictos entre los miembros de la familia al nombrar al sucesor.

### Tabla 14: Correlaciones Bivariadas (Matriz de Pearson) de las variables independientes

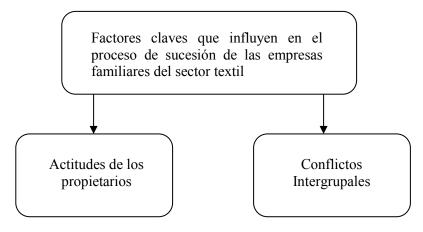
Correlación entre Variables	Correlación
Formación Propietarios - Estilos de Liderazgo	.690** .745**
Formación Propietarios – Proceso de Sucesión	

En la tabla se observan las correlaciones que resultaron del análisis estadístico a través del SPSS 15. Se muestran las correlaciones más altas con respecto a las variables independientes, dando como resultado que dentro de la variable de Actitudes de los propietarios las dimensiones de formación de los propietarios incide en el estilo de liderazgo en un .0.690 en las variables de actitudes de los propietarios y conflictos intergrupales las dimensiones de Formación del Propietario incide en el Proceso de sucesión en un 0.745, dando como resultado que estas dos variables sean factores claves que influyen en el proceso de sucesión de las empresas familiares del sector textil.

\*\*La correlación es significativa en el nivel 0.01 \* La correlación es significativa en el nivel 0.05

\* La correlación es significativa en el nivel 0.05

El hallazgo fundamental de este estudio indica que los factores claves que influyen en el proceso de sucesión de las empresas familiares del Sector Textil en Tijuana, B.C., México son las actitudes de los propietarios en cuanto al consejo familiar, el estilo de liderazgo que ejerce el propietario de la empresa y la formación que tenga este, así como los conflictos intergrupales que se presentan en el proceso de sucesión, el contexto familiar y el desarrollo del personal que labora en la empresa. Por lo anterior, en este esquema tienen mayor importancia los conflictos intergrupales y las actitudes de los propietarios, por lo cual se propone el siguiente esquema:



El siguiente esquema muestra los factores que influyen en el proceso de sucesión de las empresas familiares del sector textil en Tijuana B.C., México siendo las actitudes de los propietarios y los conflictos intergrupales los que inciden de manera directa. Fuente: Elaboración propia Flores V. y Vega A. (2012)

### CONCLUSIONES

Las empresas familiares del sector textil en la ciudad de Tijuana, B.C., se encuentran en un proceso de desarrollo, a pesar de las condiciones económicas del país, y de la actual crisis económica. Sin embargo, muchos dueños de estas empresas no tienen definido sobre la continuidad del sucesor en la empresa, no tienen preparado al sucesor para el liderazgo. Los empresarios son consientes de los problemas que va enfrentar la empresa si fallecen, incluso consideran que podrían cerrar y quebrar debido a la falta de un plan de sucesión familiar.

Además, la falta de involucramiento y preparación al futuro sucesor se verifica en la escasa participación de la familia política en la administración del negocio. No obstante, el propietario considera que no tendrá conflictos familiares al momento de designar un sucesor ya sea este un hijo (a) para el manejo de la empresa. La rivalidad alguna entre los hijos (as) del dueño con otros miembros de la familia es controlable, siempre en cuando que el sucesor sea elegido cuando esté en vida, bajo un plan de sucesión y el diálogo al interior de la familia.

Los propietarios de las empresas familiares deben procurar que los miembros de sus familias se acerquen lo más posible a sus empresa para que las conozcan y evalúen si desean participar o no dentro de ellas. La continuidad de la empresa familiar está basada en su buen funcionamiento, y éste va depender básicamente de la capacidad de anticiparse y responder a los cambios. En el proceso de planeación de la empresa familiar es muy importante que participen tanto los miembros de la familia como los principales directivos de la empresa.

Otro factor importante es la profesionalización de la empresa familiar que esta relacionado con la optimización de las áreas del negocio, lo cual tiene que ver con la preparación y especialización en las tareas de la empresa, considerando que algún miembro de la familia se prepare para que mas adelanten en cuanto ya no esté el propietario, asuma responsablemente la organización y gerencia de la empresa familiar. Se trata de responder a los retos futuros de un mercado competitivo, cuyos objetivos empresariales tendrán que apuntar a una consolidación del negocio.

Y tomar en cuenta que ell hallazgo fundamental de este investigación indica que los factores claves que influyen en el proceso de sucesión de las empresas familiares del Sector Textil en Tijuana, B.C., México

son las actitudes de los propietarios en cuanto al consejo familiar, el estilo de liderazgo que ejerce el propietario de la empresa y la formación que tenga este, así como los conflictos intergrupales que se presentan en el proceso de sucesión, el contexto familiar y el desarrollo del personal que labora en la empresa.

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# LA RELACIÓN DEL PROFESOR TUTOR UNIVERSITARIO – ALUMNO Y LOS ESTILOS DE VIDA Y CONDUCTAS DE RIESGO, EN LOS ESTUDIANTES DE LA UNIDAD ACADÉMICA HERMOSILLO DE LA UNIVERSIDAD ESTATAL DE SONORA, (UES)

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# RESUMEN

Una de las funciones de los Profesores Tutores es observar lo que afecta a los estudiantes, y en este caso, nos ocupan los hábitos que puedan afectar de manera temprana a nuestros universitarios, mostrándose en las diferentes conductas de riesgo, como son: los comportamientos relacionados con los hábitos de alimentación, el consumo de tabaco, alcohol, de drogas, la actividad física, el manejo de tiempo libre, los accidentes, la actividad sexual, el autocuidado, el sueño, manejo del stress, entre otros. Por lo que el profesor tutor precisa de identificar para prevenir y no para canalizar y corregir acciones de riesgo en el alumnado.

PALABRAS CLAVES: Docentes, tutores, estudiantes, enseñanza aprendizaje, conductas formación profesional.

# THE RELATION SHIP BETWEEN UNIVERSITY PROFESSORS AND STUDENTS, REGARDING LIFE STYLES AND BEHAVIOR RISKS OF ACADEMIANS AT THE UNIVERSIDAD ESTATAL DE SONORA (UES) LOCATED IN HERMOSILLO

# ABSTRACT

One of the tutors teacher functions is to observe closely what affects students behaviors. In this particular case, we care about those life habits which influence in an early stage of studies our scholars. Some habits affect directly our students in different risk behaviors actions, such as: eating habits behaviors, tobacco, alcohol, drugs, physical activities, hobbies and leisure management, accidents, sexual habits behaviors, selfcare, sleep habits, stress etc. Tutors Professors needs to be alert and be able to identify the right moment for intervention, as well as preventing and control measures of risk behaviors as a preventive actions not as a correctives ones.

**KEYWORDS:** Teachers, tutors, students, teaching and learning, behavior training. **INTRODUCCIÓN** 

Para una mejor comprensión de este trabajo, es necesario entender que los estilos de vida son el conjunto de actitudes y comportamientos que adoptan y desarrollan las personas en forma individual y colectiva para satisfacer sus necesidades como seres humanos; lo que conlleva a desarrollar hábitos que se encuentran entre los factores de riesgo para la salud en la población en general.

Además, ante la globalización que ha traído cambios acelerados ha venido a modificar las formas de vida en los ámbitos psicológicos y físicos, con el desarrollo de nuevos hábitos, aunado a que los adolescentes responden a diferentes riesgos, a un deseo de independencia y autonomía, sentirse atraído a lo desconocido, a lo prohibido y no aceptado por la mayoría de los adultos, empujándolos a experimentar conductas de riesgo; es decir, se les presenta la ocasión de desafiar y de comprobar su dominio sobre su cuerpo y su conducta. Situación a la cual no están exentos los estudiantes de la Unidad Académica Hermosillo, de la Universidad Estatal de Sonora (UES) que son el tema de interés de esta investigación.

Específicamente, los estilos de vida saludables incluyen conductas de salud, patrones de conducta, creencias, conocimientos, hábitos y acciones de las personas para mantener, restablecer o mejorar su salud. Son producto de condicionantes personales, económicos, ambientales y sociales, que emergen no sólo del presente, sino también de la historia personal del sujeto. Se refieren a formas cotidianas de vivir que se aplican para las distintas esferas o áreas de funcionamiento del campo vital de una persona, satisfaciendo adecuadamente las propias necesidades y optimizando su calidad de vida. (Dura Ros, s.f).

El profesor tutor debe de saber cuando es el momento de intervenir para evitar y controlar conductas de riesgo de manera preventiva, por lo que deben de tener los conocimientos básicos que le permitan identificar anticipadamente situaciones de riesgo de los estudiantes; partiendo de que es mejor la prevención que la corrección.

# ANTECEDENTES

El término "Tutor" proviene del latín "Tueor" que significa: el que representa a..., el que vela por..., el que tiene encomendado bajo su responsabilidad a otra persona; quien tutela a alguien.

En sus orígenes, la universidad medieval buscaba, en coherencia con su tiempo histórico, la transmisión del conocimiento o saber absoluto, el respeto a la verdad y el desarrollo del espíritu de estudio. Como arquetipo de universidad docente, el papel de profesor era guiar, orientar, autorizar la conducta moral, social e intelectual de sus alumnos en la búsqueda del conocimiento, como vía para el crecimiento personal, en un marco de relación personal estrecha (Rodríguez, 2004)

El enfoque tutorial de apoyo al estudiante en el nivel de licenciatura es de reciente aparición, surge en algunas instituciones de educación superior mexicanas, con la finalidad de resolver problemas que tienen relación con la deserción, abandono de los estudios, rezago y baja eficiencia terminal, principalmente. El sistema tutorial en el nivel de licenciatura se inicio en la Universidad Nacional Autónoma de México (UNAM) dentro del Sistema de Universidad Abierta (SUA), en dos modalidades distintas: individual y grupal. En la primera se atienden las dudas surgidas en el proceso de estudio particular del alumno y en la grupal se favorece la interacción de los estudiantes con el tutor para la solución de problemas de aprendizaje o para la construcción de conocimientos.

Programa que fue introducido por la Universidad Estatal de Sonora, desde el año 2004 con base a los lineamientos propuestos por la Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES) con el fin mejorar el acceso y la adaptación de los estudiantes, la orientación durante los estudios y la ayuda en la integración laboral, así como mejorar la atención brindada a los estudiantes y buscar un seguimiento más personalizado. Los cambios que se producen requieren de nuevas necesidades de formación como: el fenómeno de la globalización, los cambios de la sociedad de la información, la revolución tecnológica en las comunicaciones, la configuración del trabajo basado en la gestión del conocimiento, el nuevo marco organizativo del trabajo con rápida caducidad; son varias las tendencias que hacen importante la orientación y la tutoría sean inherentes a la función docente y que además son indicadores de calidad.

#### PLANTEAMIENTO DEL PROBLEMA

Para llevar acabo el estudio se decidió partir de universitarios con un desempeño académico bajo o reprobatorio en algunas de sus asignaturas; con el objetivo de conocer o identificar el origen de su desempeño como estudiantes, la relación entre resultados académicos y estilos vida, y desarrollo integral de su persona. Cabe aclarar que el 90% de los estudiantes de la muestra son alumnos irregulares por las siguientes situaciones: reprobación, rezago y/o convalidación de estudios por provenir de otras instituciones de educación superior.

## MARCO TEORICO

La sociedad actual globalizada y de información, se caracteriza por ser principalmente una sociedad de consumo. El avance de la ciencia y la tecnología ha hecho a este mundo más complejo, generando la apariencia de un mundo "libre" con un gran abanico de posibilidades desde la comida, diversión, profesión, trabajo, la elección de pareja y de familia, construyendo así estilos de vida que justifican y reproducen el tipo de economía, política y cultura de estas sociedades. Ante esta diversidad de opciones hoy más que nunca es necesario enseñar a pensar y a sentir de manera más crítica, creativa y ética a los adolescentes y jóvenes. Estos estilos de vida implican para los adolescentes (como etapa de transición al mundo adulto) un gran peso en la toma de decisiones. Su capacidad de elegir acertadamente supone la habilidad de valorar opciones de manera intencional y consciente, permitiéndoles a los adolescentes construir estilos de vida más saludables.

Como lo señala Krauskopf (s/f), la mirada que actualmente tenemos los adultos de los adolescentes, los identifica como una población problemática, que a menudo queda estigmatizada, esto puede ser una situación riesgosa que puede facilitar en los mismos una identidad negativa. La valoración social del mundo adulto (maestros, padres de familia...) contribuye significativamente a la construcción de la identidad de los adolescentes cuya necesidad de ser reconocidos como personas puede llevar a tener conductas problemáticas por el temor de "no ser nadie".

El reto para la familia y la escuela como primordiales socializadoras de los jóvenes junto con el grupo de iguales, ante los vertiginosos cambios sociales es la construcción de propuestas que respondan al desafio de crear opciones adecuadas a este sector "vulnerable" socialmente, para pasar de una visión de un sector problemático y de exclusión social a un sector positivo y desarrollador hacia su bienestar personal, familiar, profesional y social.

La vulnerabilidad sociocultural de la etapa de la adolescencia se asocia al concepto de "conductas de riesgo". El riesgo implica la probabilidad de que la presencia de uno o más características o elementos nocivos incremente la aparición de consecuencias adversas para la salud, el proyecto de vida o la sobrevivencia personal o la de otros (Krauskopf, s/f).

La mayoría de las investigaciones a nivel nacional e internacional Palacios, Bravo, Andrade (2007), Acero, Escobar, castellano (2007) y Gómez (2000) considera como las siguientes conductas de riesgo para los adolescentes: 1. Consumo de drogas legales (alcohol y tabaco) e ilegales, 2. Accidentes automovilísticos (exceso de velocidad), 3. Propensión a la violencia y conductas antisociales, 4. Embarazos no deseados, enfermedades de trasmisión sexual (sida) y la promiscuidad sexual y 5. La depresión, el estrés y el suicidio.

Las conductas agrupadas bajo el nombre de riesgo, pueden ser diferentes entre sí, pero su función psicológica en los adolescentes suele ser similar. Con ella los adolescentes pretenden expresar el rechazo a las normas convencionales, su independencia ante el control paterno, alcanzar un rol prestigioso con el grupo de amigos, que en algunas ocasiones expresa una adaptación pasiva a una sociedad de consumo,

que define a las personas por el "tener" (cosas, poder, relaciones) más que en el "ser" una mejor persona humana, moldeando a través de los medios masivos de información (TV, Internet...) estilos de vida no saludables.

La Organización Mundial de la Salud, define a la salud: como un estado completo de bienestar físico, psíquico y social, y no únicamente como ausencia de enfermedad o discapacidad (Álvarez y Bisquerra, 1998). Si reflexionamos sobre esta conceptualización podemos observar que la salud no es exclusividad del sector médico, sino que incluye a otros contextos sociales entre los que podemos destacar a la familia y a la escuela como promotores de salud en los niños y adolescentes.

Existen múltiples variables que explican este fenómeno de riesgo, pero la mayoría de los investigadores coinciden que las variables más relevantes son las "psicosociales" incluyéndose en espacios sociales, familiares, escolares y del grupo de amigos. En todos estos espacios encontramos factores que incrementan la experimentación conductas de riesgo: 1. en los social se destaca la accesibilidad y la aceptación del consumo de sustancias de manera formal (legales) e informal (actitudes y valores favorables al consumo), 2. en la familia se observan, relaciones afectivas pobres, una mala comunicación caracterizándose como familias disfuncionales y problemáticas, que en general, coexiste con un consumo paterno de drogas, 3.en la escuela se identifica con variables como, la reprobación escolar y la insatisfacción con la institución y 4.a nivel individual se caracteriza por una baja autoestima, la necesidad urgente de aprobación social, un alto nivel de búsqueda para experimentar nuevas sensaciones, que en ocasiones puede llevar a realizar conductas antisociales. Feldman (2006), indica que este nivel la incongruencia entre sus necesidades interiores y el mundo que los rodea puede llevar a los jóvenes a un vacío existencial, a un sin sentido de la vida. (Gómez, 2000).

Si bien en nuestras sociedades resulta aceptable cierto grado de experimentación del alcohol y del tabaco, a partir de la adolescencia, con variaciones de un contexto sociocultural u otro, la mayoría de los jóvenes al llegar a la vida adulta adoptan pautas de consumo aceptables, y no llegan a presentar problemáticas de consumo. Sin embargo es alarmante que por distintas razones, haya un número mayor de adolescentes y jóvenes que se adhieren a patrones de consumo y de situaciones de riesgo (violencia, fracaso escolar, depresión, sexualidad irresponsable, entre otros).

La familia y la escuela deben promover estilos de vida saludables. Educando hacia un enfoque de prevención de riesgos, el cual asume que a mayor conocimiento sobre los eventos negativos, mayor posibilidad de actuar sobre ellos, con la intención de evitarlos cambiando las condiciones que exponen al individuo o grupo a adquirir la enfermedad o daño. La colaboración familia y escuela deben impulsar junto con el estado políticas y programas de calidad para los adolescentes y jóvenes que promuevan zonas de protección (apoyo familiar, permanencia en el sistema educativo, trabajo, acceso a los servicios de salud) que permitan el desarrollo de una identidad positiva de los adolescentes como agentes de cambio hacia una sociedad más democrática.

Los programas sociales dirigidos a jóvenes deben disminuir la vulnerabilidad y el daño (zonas de riesgo) al que se encuentran expuestos; con una detección precoz de la población en riesgo, elaborando programas para estilos de vida saludable, como procesos formativos a incorporarse como temas transversales en los proyectos educativos formales y no formales incorporando a los propios jóvenes a las propuestas y ejecución de los programas de educación para la salud, escolares o gubernamentales. Integrando a adultos (padres y maestros) capacitados y convencidos hacia la creación de redes de apoyo comunitarias. (Álvarez y Bisquerra, 1989)

#### **METODOLOGIA**

La metodología de investigación que se utilizo en este proyecto es cualitativa, aunque también se vale de algunas herramientas de análisis cuantitativo para lograr una proximidad al problema a investigar. Para tener una primer acercamiento e identificar los estilos de vida y riesgo de los estudiantes de la Unidad Académica Hermosillo de la UES, se diseño una encuesta que arrojara la opinión de los estudiantes sobre la conducta y hábitos en los siguientes aspectos: cuidado y prevención de la salud, relaciones interpersonales, adicciones y conductas de riesgo.

La encuesta se aplicó a un grupo de 19 estudiantes del semestre 2012-1 que cursaban la asignatura de Aprendizaje y Gestión del Conocimiento, es importante mencionar que el grupo analizado tenía las siguientes características: 1.a totalidad de los estudiantes son alumnos que por diversas razones presentan un rezago respecto a sus compañeros, 2.aproximadamente el 70% son alumnos que cursan por segunda y hasta por tercera ocasión la asignatura, es decir son alumnos irregulares, 3.un 20% cursaban la asignatura a destiempo porque se cambiaron de plan de estudios o se habían dado de baja de manera temporal en la carrera y 4.un 10% son estudiantes de nuevo ingreso a la institución y no les revalidaron la materia. En términos generales son alumnos en su mayoría de bajo desempeño académico, algunos de ellos que están iniciando por tercera ocasión una carrera universitaria sin concluir las anteriores.

# ANÁLISIS DE DATOS

De los 19 encuestados 13 son varones y 6 mujeres. El 32% de la muestra pertenecían al programa educativo de Licencido en Administración de Empresas Turísticas (LAET) el 21% son de Licenciados en Comercio Internacional (LCI) y 11% son de la carrera de Ingeniero en Geociencias (IG).y el resto pertenecían a otros programas educativos como Licenciados en Entrenamiento Deportivo e Ingenieria Ambiental Industrial. (Figuras 1 y 2)



Figura 1: Sexo de los encuestados, Masculino 32% v Femenino 68%.

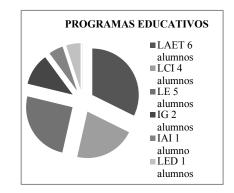


Figura 2. Alumnos por Programa Educativo.

El 84% de los encuestados son jóvenes cuyas edades oscila entre los 19 y 24 años, un 11% tienen de 25 a 30 años. En lo referente a las relaciones interpersonales se detectó que aproximadamente el 70% de los encuestados tienen una buena relación con sus compañeros y sus profesores y el restante 30% lleva una relación normal. Pese a lo anterior 63 % de los estudiantes refieren la existencia de pocos enfrentamientos entre alumnos y profesores y 74% entre estudiantes.

Cuando se les preguntó quién debe encargarse de resolver los conflictos 53% expresó que estudiantes y profesores. Un 32% dijo que cada grupo se hiciera cargo de sus problemas entre estudiantes y profesores

y sólo un 5% dijo que era responsabilidad de los docentes. Con lo anterior, podemos inferir que los estudiantes les queda claro lo importante que es su participación para las buenas relaciones interpersonales, la resolución de conflictos y un 47% destacó la importancia de hablar, de comunicarse. Un 16% mencionó que se pueden hacer actividades de convivencia. (Figuras 3)

Figura 3. Insiste en que lo atienda si un compañero trata de imponer su criterio



Como sabemos, para que en una sociedad impere la justicia, el orden y la adecuada convivencia de quienes la integran es necesario que se respeten las normas tanto sociales como legislativas, en este sentido la percepción de los estudiantes pone de manifiesto un área de oportunidad importante, expresando que se van ha respetar en la medida que los profesores y autoridades sean el ejmplo en su quehacer diario y dandole importancia; asi como sancionando a quien no las acate. Los resultado de esta encuesta arrojo datos un tanto preocupante; debido a que únicamente un 5% de los encuestados dijo que en la institución había mucho respeto de las normas, 37% dijo que era poco, 47% regular y 11% nada. (Figuras 4 y 5)

Figura 4. Enfrentamiento entre el Profesor y el Alumno

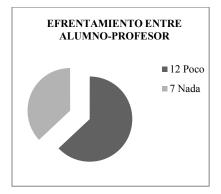
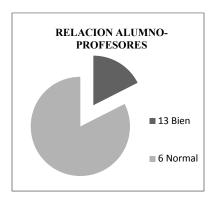


Figura 5. Relación entre profesores y alumnos es normal.



Ante la pregunta de que persona ha recibido violencia el 58% de los alumnos no contestaron la pregunta, un 16% recibe violencia de su familia, 11 % amigos, 5% de padres u otros y 5% no recibe violencia. Seguida de la pregunta, como reacionan ante la violencia respondieron: 47% hablando , 16% haciendo actividades de convivencia y el 11% relacionarse entre las personas , 5% platicas de valores, 5% saliendo de la rutina, 5% cambiando la cultura en casa y 11% no contesto. Se puede observar como estas preguntas tienen una relación mientras en la primera que cuestiona si han recibido violencia el 58% repospondio que no, pero ante la pregunta de como reaccionan ante la violencia solo un 11% no respondio; es decir; un 47% que tal vez no respondió sinceramente la primer cuestionamiento que sería un aspecto a estudiar para futuras investigaciones; considerando algún otro método donde se pueda sensibilizar a los estudiantes de la importancia de comunicar los problemas que le afecta para buscar soluciones en benefícios de ellos mismos. (Figuras 6 y 7)

Figura 6. El porcentaje más alto no contesto esta pregunta.

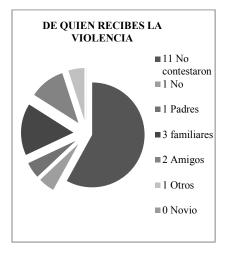


Figura 7. Los conflictos se resuelven hablando.



En lo referente a la auto estima la percepción de los encuestados es buena 48%, muy buena 42% y sólo un 5% declaró que era mala. En lo relacionado al manejo del estrés un 32% expresó que no lo controlan como quisieran y el 21% dijo que lo controlaban siempre y un 42% que casi siempre. Se puedo detectar que el 74% de los estudiantes siente en algún momento estrés que les puediera estar afectando, no se debe de dejar de lado que son estudiantes con algún rezago académico.

Las horas de sueño que tiene los estudiantes no son suficientes, sólo 21% duerme 7 horas diarias y el 70% solo a veces. No se preguntó en la encuesta pero de manera directa con frecuencia los alumnos expresaban que por las noches o salían con amistades o pasaban mucho tiempo en las redes sociales por internet.

En lo relacionado al cuidado de la salud se pudo inferir que entra dentro de los intereses de nuestros estudiantes ya que un 37% hace ejercicio o realiza algún deporte de manera rutinaria y 27% algunas veces. (Figura 8)

Figura 8 .La mayoría realiza algún deporte o ejercicio.



Al parecer el autocuidado es más por imagen que por salud ya que sólo un 11% va al doctor de manera frecuente por prevensión y sólo el 16% va al odontólogo de manera preventiva. En lo que se refiera a si examinan su cuerpo, sólo 31% de los estudiantes lo hace en busca de cambios físicos. En lo que se refiere a situaciones de riesgo al parecer las relaciones sexuales no son una de ellos, ya que sólo un 10% corre el riesgo de mantener relaciones a veces con preservatiavo, el 53% siempre lo usa y un 21% practica la abstinencia.

En lo que respecta a los vicios, en particular el cigarrillo, tal parece que el consumo de tabaco no es un gran problema para los encuestados ya que el 74% no fuma , el 21% consume de uno a tres cigarillos al día y únicamente 5% consume más de ocho. En este sentido, sigue siendo importante las campañas antitabaco porque lo que en un tiempo se consume de manera moderada se puede convertir en una adicción.

El 100% de los encuestados declaró que no consumen drogas de ningún tipo, pero no por ello están libres de riesgo porque conviven frecuentemente con personas que si las consumen. Un 21% dijo que 2 ó 3 de sus compañeros usan drogas, 10% expresó que más de 4 personas allegadas a él lo hacen y 11% dijo que casi todos sus compañeros las consumen. Los datos anteriores constituyen un foco rojo que de debe atender de manera inmediata pues esos compañeros y allegados o son estudiantes de la institución o están en un círculo de influencia muy cercano a nuestros alumnos. El consumo de cerveza es otro signo de alerta, ya que 37% beben en las fiestas, 32% los fines de semana. Al igual que las drogas el consumo frecuente de bebidas con alcohol puede generar una adicción.

Los hábitos alimenticios como bien sabemos que se transmiten desde los núcleos familiares, es decir, de padres a hijos y éstos estan influidos por varios factores, entre los que destacan: el lugar geográfico, el clima, la disponibilidad de la región, las costumbres y experiencias, y desde luego, también tiene que ver la capacidad de adquisición, la forma de selección y preparación de los alimentos y la forma de consumir, es decir, los horarios, la compañía, etc. Por lo tanto, los habitos alimenticios es un conjunto de costumbres que determinan el comportamiento del los estudiantes en relación con los alimentos y la alimentación. Al hacerle la pregunta a los estudiantes, si consumen entre comidas alimentos saludables el 37% contestaron que algunas veces, y el 10% que nunca, el 11% muchas veces y el 5% no contestó, percibimos que son muy pocos los que entre comidas consumen alimentos saludables.

En lo que se refiere si estan pasados de peso, contestaron el 5 % que si de 9 a 15 kilos y el 37 % respondieron que de 5 a 8 kilos, y el 58% contestó que no. Nos damos cuenta que casi la mitad de los entrevistados está pasado de peso, lo cual es preocupante y debemos de implementar estrategias mediante nutriólogos para reducir este porcentaje. Encontramos que los estudiantes en su mayoría no consumen la cantidad recomendada de agua natural al día, porque sólo el 37% asegura consumir agua de manera regular durante el día. Sin embargo, los resultados arrojaron, que el consumo de gaseosas es alrededor del 80 %. Los alumnos encuestados, en este rubro, respondieron de manera alarmente al consumo de comidas rápidas y comida chatarra, siendo aproximadamente entre un 70% y 80% que de manera constante se alimenta de forma no saludable. Lo anterior, se ve reflejado en nuestra encuesta que nos indicaron que existe sobrepeso en nuestra comunidad estudiantil.

# **CONCLUSIÓN Y SUGERENCIAS**

Los resultados son una aproximación de las conductas de riesgo y salud de los estudiantes de la Unidad Académica Hermosillo de la UES que tienen como principal caracteristica el rezago académico; lo que permitirá en futuras indagaciones replantear las herramientas a utilizar, con el objetivo de tener un mayor acercamiento con los estudiantes, para que comunique realmente cual es su situación, debido a que en algunos de los caso denota la abstención de ellos ante las preguntas planteadas. No obstante, los resultados en este primer acercamiento se concluyó lo siguiente:

Resulta fundamental que se impartan cursos o alguna asignatura de formación integral que promueva entre los estudiantes la salud física y mental, pero más de manera preventiva que remedial. Motivo por el cual, se requiere un Programa Institucional de Tutorías con más efectividad que cobertura o simulación en la cual se apoye a los alumnos "problema" sin descuidar a los buenos estudiantes que requieren impulso para potenciar sus cualidades. Es muy importante que los puestos directivos sean ocupados por personal sensible a las necesidades académicas y humanas de alumnos y profesores que a las del sistema administrativo. Es necesario, incorporar más a los estudiantes en actividades sustantivas de la institución que le beneficien de manera directa para no sólo atenderlo, sino también contribuir a su responsabilidad personal y social.

Se recomienda ampliar los servicios de salud física y mental acordes al crecimiento de la población estudiantil. Es preciso, vincularse de manera efectiva con otras instituciones de salud o educación públicas para que se mejore la atención integral del alumno sin necesidad de que sea más costoso. Se deben desarrollar programas de servicio social encaminados a incidir positivamente en la sociedad que finalmente beneficia a nuestros estudiantes, pues es el ambiente en el cual habitan.

Incorporar en el Programa Institucional de Tutorías un sistema incluyente y participativo en el cual se involucren de manera más activa profesores, estudiantes, empleados y padres de familia.

Realizar diagnósticos específicos de las problemáticas de mayor impacto de nuestros estudiantes con la finalidad de establecer indicadores y metas que a corto y mediano plazo que controlen o erradiquen alguna problemática: ejemplo el uso de drogas, alcoholismo, enfermedades de transmisión sexual.

Utilizar una bases de datos en la cual se de seguimiento a cada uno de nuestros estudiantes. Y finalmente, podemos decir que es de suma importancia, solicitar más recussos estatales y federales para fortalecer la atención a los estudiantes por medio del Programas Institucional de Tutorías.

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José Alexander Carreño Dueñas, Universidad del Rosario RESUMEN

Esta Investigación analizó la tendencia que tuvieron los resultados de los indicadores de tasa de infecciones intrahospitalarias y de mortalidad hospitalaria desde el año 2006 hasta el 2010. Se establecieron las diferencias de estos resultados entre Hospitales, con y sin programas de formación en medicina, tantos públicos como privados en más de 110 Instituciones de salud de 11 ciudades de Colombia.

Se evidenció el impacto de la promulgación de la ley 30 de 1992, sobre el número de programas de medicina, que fue incrementado considerablemente en la última década. Esta situación llevó a considerar dos cosas: primero que el número de Instituciones de práctica en el país podría ser insuficiente ante la gran cantidad de nuevos estudiantes de medicina, con algún grado de hacinamiento en los sitios de práctica y segundo que esa situación podría tener algún efecto sobre la calidad de la atención en salud, especialmente sobre el resultado de los indicadores planteados.

Con los resultados obtenidos se lograron evidenciar importantes deficiencias técnicas en el reporte obligatorio de la información por parte de los Hospitales, en donde solo un 10% de estos cumplieron con el reporte completo de los indicadores desde el año 2006; así mismo se encontró que se registra solamente un 65% del total de la información que debería estar publicada para la consulta de la ciudadanía. Para el análisis estadístico de los datos, se utilizó el Ji al cuadrado de tendencias, que no arrojó diferencias estadísticamente significativas de los indicadores en los periodos analizados entre los tipos de Hospitales; pero sí evidenció diferencias entre la suma de mínimos cuadrados de dos de los indicadores. Sin embargo se requieren estudios adicionales controlados para establecer diferencias en los resultados de la calidad en salud.

**PALABRAS CLAVES:** Indicadores de calidad en salud, Infecciones intra hospitalarias, mortalidad intra hospitalaria, Hospitales de enseñanza

# RISK AND QUALITY HEALTH IN TEACHING HOSPITALS IN COLOMBIA

# ABSTRACT

This study described the results of the indicators of nosocomial infections and mortality from 2006 to 2010 and established differences between teaching and nonteaching hospital both public and private in 11 cities in Colombia. This study found that the number of medical schools increased considerably in the last decade due to the Law 30 of 1992 and perhaps the number of institutions practice may be insufficient to the new students. Of the other hand this effect may have some impact over quality of care and outcome indicators measured. Additionally this study, showed important technical deficiencies in mandatory reporting of information by the hospitals, because only 10% of them reported the totally of the indicators since 2006, and only 65% of total information that should be published.

The statistical analysis of the data, (the chi-square trend), not showed no statistically significant differences in the indicators in the periods analyzed between institutions, but they showed differences between the total least squares two of the indicators. Moreover it's necessary further researches for establish real differences between teaching Hospitals

# **JEL** I10, I11, I12,

KEYWORDS Quality of health, teaching and nonteaching hospitals, nosocomial infections, mortality.

# INTRODUCCIÓN

Siempre ha existido un extenso debate entre los profesionales de la salud y la comunidad en general acerca de si los resultados de calidad en salud son más favorables en Hospitales con programas de formación en medicina frente a los que no tienen programas. Algunos estudios han mostrado resultados a favor de unos y en contra de otros.

El Hospital Universitario se define como un escenario académico, científico – técnico que tiene como fundamento esencial la construcción de conocimiento sobre la enfermedad, generar un pensamiento crítico frente al saber técnico existente y servir de escenario para la práctica y formación de futuros profesionales de la salud (Eslava 2002). Así mismo un Hospital Universitario necesita adecuarse estructural y funcionalmente para permitir una mayor y mejor organización para la docencia de la medicina y la investigación clínica. Necesita además una adecuada relación de los servicios asistenciales y las unidades docentes así como con las áreas de facturación y cartera (Millan 2008). Los hospitales Universitarios gozan de amplia reputación en la opinión pública de los Estados Unidos, consistente en que estos por lo general proveen una atención médica de mayor calidad (Boscarino 1992). Sin embargo el costo de la atención en estas instituciones puede ser mayor en comparación a los que no lo son (Coleman and Dobson 1998; Sloan 1999; Whittle et al. 1998).

Desde un punto de vista público y profesional, se puede entender que las características de los hospitales universitarios se especializan en el tratamiento de enfermedades complejas y de muy escasa presentación, así como de pacientes complicados; esto gracias a la provisión de servicios especializados, tecnología avanzada y la conducción de investigación biomédica (Neely 1998). Algunos servicios como cirugía especializada y trasplantes de medula ósea se aplican predominantemente en hospitales universitarios. (Levin y Cols 2000); así mismo se atienden patologías muy complejas y sofisticadas, lo que obliga a que la atención médica tenga un enfoque multidisciplinario. Esta condición facilita un aumento de los costos frente a la atención ofrecida en un Hospital no Universitario. (Kupersmith 2005) Otras misiones distintivas de los Hospitales universitarios incluyen la educación médica y el entrenamiento, innovaciones en la terapia clínica y tratamiento para pacientes con recursos bajos particularmente en los hospitales docentes públicos. (Blumenthal y Cols, 1997). Sin embargo a pesar de la reputación de ser altamente especializados en el cuidado y el tratamiento, en la práctica ofertan servicios que en su mayoría son rutinarios como manejo de falla cardiaca, neumonía y accidentes cerebro vasculares (Association of American Medical Collages 1998).

En una revisión sistemática que incluyó 132 estudios desde 1971 hasta 2005 no evidenció que la salud de los pacientes se afectara por la presencia de estudiantes de medicina; sin embargo las diferencias encontradas en algunas enfermedades específicas no pudieron ser excluidas y es probable que si existieran pequeñas diferencias entre los resultados (Papanikolaou, 2006). En otra revisión de la literatura que incluyó 23 estudios de 1989 a 2004, comparó la calidad de la atención en salud entre Hospitales Universitarios y no Universitarios en Estados Unidos y encontró que los primeros tuvieron mejores resultados en calidad que los no Universitarios, basados en indicadores de mortalidad. (Kupersmith 2005). Otro estudio realizado en el año 2000 determinó la asociación de la calidad en salud y la mortalidad por infarto agudo de miocardio en pacientes que eran usuarios del servicio de Medicare; logró demostrar una asociación con una mejor calidad de la atención y con una reducción de la mortalidad en los hospitales Universitarios (Allison, 2000). En West Suffolk y Southern Norfolk (Inglaterra), mediante un estudio se evaluó la satisfacción de los pacientes en cinco Instituciones de práctica médica asistencial, utilizando la

aplicación de una encuesta validada, dirigida a 240 pacientes después de la consulta médica. La satisfacción se evaluó con y sin presencia de estudiantes de medicina de la Universidad de Cambridge. Los resultados arrojaron que la satisfacción no se ve afectada por la presencia de estudiantes durante la consulta; en tanto que los pacientes apoyan la presencia de los estudiantes siempre y cuando se les informe y se les permita decidir mediante un consentimiento informado la aceptación o no de su presencia en la consulta (Benson, 2005). Otra revisión sistemática que incluyó veinte estudios realizado entre 1985 y 2001, encontró en algunos de estos, resultados más favorables para los Hospitales Universitarios en servicios de pediatría y cuidado intensivo neonatal; sin embargo esta revisión concluyó que muchos de los estudios fueron realizados con base en estudios observacionales y no mediante estudios de intervención, debido a esto pueden haber restricciones propias de esta clase de estudios y pueden tener limitaciones con respecto a variables que no se pueden modificar. (Ayanian 2002)

Otras revisiones sistemáticas que han evaluado la calidad de la atención entre estos Hospitales han encontrado que para condiciones comunes particularmente en pacientes ancianos, los Universitarios ofrecen mejor calidad de atención frente a los que no los son (Cunningham 1999). Otro estudio realizado en el año 1998 mediante una revisión clínica en cuatro estados de Norte América comparó los resultados de la calidad en salud de dos patologías frecuentes (insuficiencia cardiaca congestiva y neumonía) entre estos Hospitales y encontró mejores resultados en los Universitarios en términos de disminución de la tasa de mortalidad (Ayanian, 1998). Para el año 2011 en la lista de los mejores 45 Hospitales de América Latina, el 20% de ellos fueron Hospitales Universitarios (América Economía 2011)

Contrariamente otros estudios sugieren que los Hospitales Universitarios pueden ofrecer una menor calidad en la atención frente a los que no lo son; particularmente por la presencia sustancial del personal en entrenamiento y un rol menos importante de los médicos tratantes que podría resultar en una atención más fragmentada y en un menor cuidado del paciente para lo cual otros estudios plantean que se requiere ajustar los programas de formación médica (Battles JB 2001, Halbach JL 2005). Otros estudios que también reportaron empeoramiento de la calidad en Hospitales Universitarios fueron especialmente en áreas de cuidado de enfermería, cuidado intensivo pediátrico y servicios quirúrgicos (Pollack 1994, Sloan 1999, Volpp KG 2003). Otro estudio consideró que en los Hospitales Universitarios ciertos equipos de salud pueden llegar a requerir una mayor formación para evitar una menor calidad en la atención. (Flin R 2004) y otros estudios en cuanto al impacto sobre las tasas de mortalidad, no encontraron diferencias a corto plazo en ninguno de los Hospitales (Schultz, Whittle 1998).

Otros estudios han tratado de determinar si existe alguna asociación entre los estudiantes de medicina en formación y la ocurrencia de eventos adversos por la falta de formación y experiencia, pero en realidad ninguno de esos estudios demostraron tal asociación; los eventos que ocurren en los pacientes son generalmente el resultado de una atención deficiente que no solamente es debida por la presencia de estudiantes. (TA Brennan 2004), (Aron DC 2002) Incluso algunos estudios plantean que la dotación no controlada de nuevas tecnologías son las que tiene una mayor asociación con los eventos adversos que los mismos estudiantes (Koppel R 2005, Adams KA 2005).

La calidad en salud ha sido definida como "la obtención de los mayores beneficios con menores riesgos para el paciente en función de los recursos disponibles y de los valores sociales imperantes" (Donabedian A. 1980). Suñol R. (2008) la define como: "La medida en que los servicios de salud, tanto los enfocados a los individuos como a las poblaciones, mejoran la probabilidad de unos resultados de salud favorables y son pertinentes al conocimiento actual profesional. La Organización Panamericana de la Salud (OPS), por su parte, la define: "Conjunto de características de un bien o servicio que logran satisfacer las necesidades y expectativas del usuario o cliente" (1999). Espigares (2002), considera la calidad en salud como la relación que debe existir entre la satisfacción de las necesidades y expectativas de los pacientes y el menor gasto de recursos.

Medir la calidad en salud es un tema complejo y por lo cual se utilizan indicadores que son medidas cuantitativas de la ocurrencia de eventos expresados en porcentajes (Espigares 2002). La medición de la calidad en la atención médica ha llevado a evaluar muchos indicadores que permiten establecer diferencias entre hospitales; algunos de ellos son: la mortalidad intra hospitalaria que aparece como uno de los indicadores que más ha sido comparado; otros ampliamente utilizados son también: tasa de infecciones intrahospitalarias, tasa de eventos adversos, tasa de resistencia bacteriana, porcentaje de satisfacción, entre otros. En Colombia la calidad de la educación que reciben los estudiantes se evalúa mediante el registro calificado, la acreditación de programas y de instituciones, el registro calificado de especialidades médicas y los exámenes de calidad de la educación superior (ECAES) y el establecimiento de estándares de calidad superior para las facultades de medicina y Hospitales universitarios es con la acreditación.

Colombia de acuerdo a su población tiene una sobre oferta de Escuelas y de estudiantes de medicina, para el 2011 había 58 facultades (1 facultad por cada 810,000 habitantes) y más de 6500 estudiantes. (Gaviria, 2006). Pero con una limitación importante de Hospitales, centros de práctica y Docentes. De acuerdo a la información publicada por el Ministerio de Salud, actualmente en Colombia del total de las Instituciones prestadoras de servicios de salud habilitadas, el 89% de ellas son de naturaleza privada y de las 10,025 Instituciones que prestan servicios de salud en todo el país, tan solo 22 se encuentran acreditadas (0,2%) y de esa cifra 11 Hospitales tienen programas de formación en medicina.

Ante esta situación es necesario establecer si la calidad de educación que reciben los estudiantes es la más adecuada y si esta condición tiene algún impacto sobre la calidad de la atención del paciente, especialmente en dos indicadores: infección intra Hospitalaria definida por el Ministerio de Salud de Colombia como el proceso contraído en un centro hospitalario que se manifiesta durante o después de 48 horas de la internación y que no estaba presente ni incubándose en el momento del ingreso. Una infección adquirida en el hospital puede ponerse de manifiesto luego del alta del paciente. Según las estadísticas de la OMS una media del 8,7% de los pacientes de un hospital presentan infecciones nosocomiales. La mortalidad Hospitalaria definida como el número total de pacientes hospitalizados que fallecen después de 48 horas del ingreso dentro del total de pacientes hospitalizados. Este indicador ha sido utilizado dentro de los sistemas de salud para evaluar resultados relacionados con la atención. Se encuentra directamente relacionado con características como el nivel de complejidad, niveles socio culturales y perfil epidemiológico de la población usuaria y por esta razón requiere de ajustes de riesgo sensibles.

Se seleccionaron los Hospitales más importantes de segundo y tercer nivel de complejidad, públicos y privados de once ciudades principales de Colombia, posteriormente se obtuvo la información registrada en el sistema de información para la calidad de la atención en salud del Ministerio de salud y protección (http://201.234.78.38/ocs/public/informacion/Default.aspx) de los indicadores de infección intra Hospitalaria y mortalidad reportados semestralmente por las Instituciones desde el año 2006 al 2010. Una vez obtenida la información, se clasificaron los Hospitales según su naturaleza pública o privada y se estableció el tipo de convenio docente asistencial que tenían con las Universidades. Los datos se tabularon y fueron analizados con epi-info y SPSS, se realizaron los siguientes cálculos: descripción de variables, suma de mínimos cuadrados (LMS) para los diferentes periodos, *ji* al cuadrado de tendencias, para establecer diferencias estadísticamente significativas entre los periodos observados.

#### RESULTADOS

Se realizó un análisis de la tendencia de los indicadores de Mortalidad Hospitalaria mayor a 48 horas y tasa de infecciones intra hospitalarias desde el año 2006 al 2010; El total de Hospitales incluidos fueron

112 y se escogieron principalmente por las siguientes condiciones: nivel de atención o complejidad (solo se incluyeron niveles II y III) y tamaño de la institución > a 100 camas. En total se incluyeron 112 Hospitales, de estos 83 (26%) fueron públicos y 29 (74%) privados con y sin programas de formación en medicina, encontrando que todos los Hospitales Públicos tuvieron programas de formación en medicina. De acuerdo a la distribución según las actividades docentes, el 62% de todas las instituciones tenían convenios docente asistenciales con programas de medicina y y de estas Instituciones privadas 43 (51%) eran docentes. (Tabla 1)

Para el indicador de infección intrahospitalaria, de las 112 Instituciones escogidas tan sólo 10 de Ellas reportaron la totalidad de los 8 periodos, lo que equivale a un 9% de cumplimiento, 4 Instituciones en Bogotá, 4 en Medellín, 1 en Barranquilla y 1 en Manizales. De los 896 datos esperados de los resultados de los indicadores (112 Instituciones, multiplicado por 8 periodos) tan solo se obtuvieron 595 datos; lo que equivale al 64,4% de reporte. El resultado de los 8 periodos de estudio no mostró una tendencia definida de este indicador a la mejoría o al empeoramiento (Figura 1). El resultado más bajo de tasa de infecciones fue obtenido por las Instituciones privadas sin convenios docentes 1.62 (IC 95% 1.32 - 2.02) en contraste con las Instituciones privadas con convenios docentes 2.3 (IC 95% 2.25 - 2.63) y las Publicas 2.2 (IC 95% 1.98 - 2.41) (Tabla 2)

Para el indicador de Mortalidad Intrahospitalaria, de 111 Instituciones, nuevamente 11 reportaron la totalidad de los 8 indicadores, un cumplimiento del 10%. De los 888 datos esperados, tan solo se obtuvieron el 65% de los datos (577 datos). El resultado de los 8 periodos de estudio no mostró una tendencia definida de este indicador a la mejoría o al empeoramiento (Figura 2) La mayor tasa de mortalidad correspondió a los Hospitales Públicos docentes que fue de 20.14 (IC 95% 21.61 – 20.62), mientras que la menor tasa se observó en las Hospitales docentes privados con 16.33 (IC 95% 15.27 – 17.24). (Tabla 3)

# DISCUSIÓN

Puede decirse que las condiciones para la formación de estudiantes de medicina en Colombia no son las ideales debido a situaciones de saturación y hacinamiento, porque existe una limitación importante en la cantidad de escenarios para realizar las prácticas, debido a una sobre oferta de escuelas de medicina, ya que se considera que 58 Escuelas de medicina en Colombia son demasiadas de acuerdo a la población del país, 1 escuela por cada 810,000; teniendo en cuenta que en otros países de la cantidad es menor siendo de aproximadamente de 1 escuela por cada 2 millones de habitantes; por ejemplo Argentina tiene 24, Chile 10, México que tiene una población de mas de cien millones de habitantes tiene 55; en Europa países como España con una población un poco menor que la de Colombia tiene 31, Alemania con casi el doble de la población tiene 37. Brasil 87, Estados Unidos 154 (Database of Medical School 2011)

La formación de estudiantes de medicina es predominantemente privada, se encuentra que el 74% de las escuelas de medicina son privadas y en cuanto a la calidad de educación de estos programas sólo 18 se encuentran acreditados (30%). Es evidente que Colombia requiere una modificación a la regulación actual frente a la cantidad de Escuelas de Medicina que implique estudios de necesidad por regiones y que limite la creación de nuevas Escuelas de Medicina. Así mismo es necesario realizar una distribución mas equitativa del número de profesionales en las regiones geográficas; porque se observa una mayor concentración en las zonas centrales urbanas, mientras que las zonas rurales se encuentran menos cubiertas; mas sin embargo esta inadecuada distribución de profesionales, se produzca quizás por la inseguridad debida a los conflictos armados en esas zonas que vive el país.

La gran mayoría de Hospitales que tienen programas de formación en medicina, no cuentan con la categoría de ser Universitarios y tal como se ha establecido por la normatividad, para poder obtener esta

categoría deberán acreditar sus programas de formación y esto implica inversiones de recursos adicionales que se desconoce realmente si estarán dispuestos a asumirlos y esto puede conducir una crisis en cuanto a la cantidad de escenarios de formación académica para el 2016, ya que para ese año será el plazo máximo para que los Hospitales que cuentan con programas de formación en medicina se acrediten y obtengan la categoría de Universitarios; de lo contrario no podrán seguir recibiendo estudiantes. De acuerdo al marco normativo vigente la educación de estudiantes de medicina podría enfrentarse a la falta de escenarios adecuados para la docencia y de mantenerse la tendencia actual podría existir una mayor concentración de estudiantes en la región central y costa atlántica. Este aumento con la oferta de médicos graduados, probablemente el mercado laboral no podrá absorber.

En la actualidad no existe un consenso sobre la cantidad adecuada de médicos necesarios para atender las necesidades de salud en un país; sólo se toma en cuenta un parámetro básico de cálculo establecido por la Organización Panamericana de la Salud (OPS) de 10 médicos por cada 10000 habitantes, desconociendo si esta relación tiene aplicación práctica para cada país o por el contrario obedece a una recomendación de carácter internacional. Datos del Ministerio de la Protección Social - Cendex en el informe sobre los Recursos Humanos en Salud en Colombia, balances, competencias y Prospectiva Tercera Edición 2009 reportaron un censo de médicos de 70,079; que de acuerdo al parámetro de la OPS existiría una sobre oferta de mas de 25,600 médicos, situación que puede empeorarse de no tomar medidas correctivas. Adicionalmente el número de médicos graduados cada año es demasiado frente a las necesidades del país; en los últimos cinco años en promedio se están graduando aproximadamente mas de 3,500 médicos por año.

En cuanto a la información en salud, a pesar que normativamente está establecido que el envío de la información de los resultados de los indicadores en salud por parte de los Hospitales debía ser semestral y obligatorio; se encontró que este reporte no se está realizando adecuadamente al encontrarse tan solo un 65% del total de los datos que deberían estar registrados y tampoco se está cumpliendo con la periodicidad establecida. Esto refleja una inadecuada cultura de reportar la información y el incumpliendo con uno de los principios normativos del sistema de información para la calidad como lo es el de validez y confiabilidad. Tan solo un 10% de los Hospitales reportaron la totalidad de los resultados.

Por otra parte el análisis estadístico de la tendencia de los indicadores de infecciones intrahospitalarias y mortalidad hospitalaria fue estadísticamente significativo en establecer ausencia de variabilidad en los resultados de los periodos analizados; lo que lleva a inferir que los resultados de estos indicadores, independientemente del tipo de Institución, no presentan tendencias ni a la mejoría ni al empeoramiento. La ausencia de variabilidad de estos indicadores desde el año 2006 al año 2010; por consiguiente lleva a pensar que no se está cumpliendo con otro de los principios normativos del sistema de información para la calidad como lo es el de eficiencia, porque no hay evidencia hacia el mejoramiento en los resultados.

Para el indicador de infecciones intrahospitalarias se desconoce si los Hospitales están utilizando la metodología propuesta por el ministerio de la protección para la captura y el respectivo cálculo, ya que puede considerarse que de acuerdo a los resultados encontrados de este indicador los resultados fueron mucho menores a los reportados por otros Hospitales a nivel mundial. Una posible explicación de este hallazgo podría ser que este indicador está siendo mal medido, si en el denominador se están agregando todos los pacientes con estancias inferiores a 48 horas. Los resultados de tasa de infecciones intra hospitalarias en Hospitales con prácticas docentes públicas o privadas presentaron una tasa un 42% mayor que las instituciones sin prácticas docentes (p<0,05); con lo que puede llevar a plantear que los pacientes que asisten a Instituciones con convenios docente asistenciales pueden tener una mayor probabilidad de contraer algún tipo de infección intrahospitalaria. Esta situación contrasta con lo planteado por muchos estudios en el sentido que en los Hospitales Universitarios se atienden patologías más complejas y de difícil manejo. Mas sin embargo también podría plantearse que en los Hospitales con prácticas docentes

no se estén llevando a cabo los mejores controles para prevenir las infecciones nosocomiales dada la gran cantidad de estudiantes alrededor de un mismo paciente.

El promedio general del indicador de infecciones intrahospitalarias de todas las instituciones fue de 2.04 (IC 95% 1.32 - 2.63) esto contrasta con la prevalencia encontrada en varios estudios: en Holanda en 2009 llamado PREZIES que recolectó información de 26,937 pacientes hospitalizados en donde la tasa de infecciones intra hospitalarias fue 7.2% (IC 95% 1.4 - 16.5) (Van der Kooi, 2009). Otro estudio realizado en Serbia en el año 2009 entre 764 pacientes estudiados, la tasa de infecciones intra hospitalarias fue de 6.2% (IC 95% 5.6 - 6.8) (Ilic & Marković-Denić, 2009). Igualmente un estudio prospectivo de 5 años realizado en cuba desde 2000 hasta el 2004, analizó la información de 93,684 pacientes que egresaron de un Hospital de tercer nivel de atención, encontrando que 2,979 pacientes presentaron algún tipo de infección intra hospitalaria, que corresponde a una incidencia acumulada de 3.1% por cada 100 pacientes egresados. (Suárez, 2009) Los datos del National Nosocomial Infections Surveillance (NNIS) de 1992 a 2004 realizado en Estados Unidos mostraron que entre un 5 a 10% de los pacientes hospitalizados presentaron al menos 1 episodio de infección intra hospitalaria durante su estancia. Podemos observar que los datos de estos estudios mencionados, presentan cifras más elevadas de las que están siendo reportadas por los Hospitales en Colombia; lo que lleva a preguntarse por una parte: si el indicador de infecciones intra hospitalarias estará siendo bien calculado o por el contrario los resultados obtenidos de este indicador son tan buenos que superan a los de los países desarrollados.

El resultado promedio de la mortalidad evidencia que los Hospitales Públicos Docentes tuvieron en promedio una tasa de mortalidad 24% mayor que las Hospitales docentes privados. Este resultado podría contrastarse con lo encontrado en el estudio de Allison en el 2000 en donde se evidenciaron mejores resultados sobre patologías cardiacas en hospitales Universitarios; así mismo puede existir una explicación del comportamiento de este indicador en el sentido que los pacientes que asisten a hospitales públicos son personas de bajos recursos y con bajas condiciones de vida y así mismo como se ha mencionado los hospitales con prácticas docentes ofrecen una atención con enfoque multidisciplinario e incluso con tecnologías de ultima generación que podrían favorecer la sobrevida de los pacientes; pero el factor de confusión se da en el sentido que los Hospitales públicos atienden en su mayoría a pacientes de escasos recursos. Puede decirse que los resultados del indicador de mortalidad intra hospitalaria pueden estar siendo afectados por condiciones de inequidad social, tal como fue establecido por un estudio realizado en Brasil en donde se encontró una asociación estadísticamente significativa del nivel socio económico con la mortalidad general y con enfermedades circulatorias y causas externas (Carneiro de Oliveira, 2010). En este caso se plantea que las prácticas docentes carecerian de algún impacto sobre la mortalidad hospitalaria y que los resultados podrían obedecer más a condiciones socio economicas.

# CONCLUSIONES

Se considera que las Instituciones con programas de formación en medicina en Colombia deberán fortalecerse en el sentido de garantizar y adecuar escenarios para atender la gran demanda de nuevos estudiantes de medicina. En este sentido se hace un llamado al Gobierno en ejercer un control sobre la calidad y validez de la información de la calidad en salud que se está siendo registrada, que de acuerdo a lo encontrado, los resultados no se relacionan con estándares internacionales y la comunidad en general no se está beneficiando y tampoco puede tomar decisiones basadas en estos resultados y determinar la demanda real de médicos que el país necesita y en ese sentido revaluar la cantidad existente de programas de medicina.

Los Hospitales también deben ser conscientes que el objetivo principal de la medición de los indicadores es para lograr un mejoramiento y ninguno de los indicadores medidos mostró alguna tendencia hacia ello, se hace un llamado especial a revaluar y plantear los planes de mejoramiento para el logro de este

objetivo. Es necesario incluir la cultura de la medición en los planes de estudio de los programas de formación médica de pregrado, tendiente mejorar la calidad y la validez de la información en salud.

#### LIMITACIONES

Con la información en salud obtenida de estos Indicadores podría ser limitado un adecuado análisis de estos datos y una evaluación apropiada de la gestión de la calidad de la atención en salud que se está prestando en los Hospitales. La información registrada podría limitar las decisiones de los usuarios para elegir libremente con base a la calidad de los servicios donde pueden ser mejor atendidos y esta situación va en contra vía de lo establecido por la normatividad vigente.

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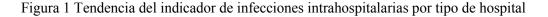
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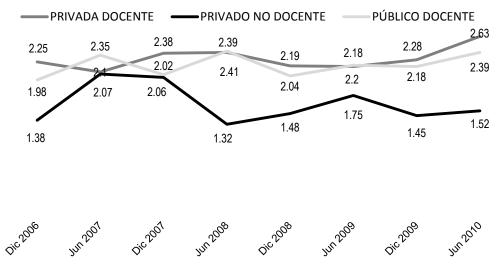
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CIUDAD	Hospital Público Docente	Hospital Privado Docente	Hospital Público no Docente	Hospital Privado no Docente
Bogotá	8	12	0	11
Medellín	3	9	0	3
Cali	3	4	0	5
Barranquilla		2	0	11
Cartagena	2	2	0	4
Bucaramanga	3	4	0	2
Pereira	4	1	0	2
Neiva	1	1	0	1
Manizales	1	3	0	1
Tunja	1	1	0	2
Popayán	3	1	0	1
TOTAL	29	40	0	43

Tabla 1 Distribución de los Hospitales según su condición y por cada ciudad

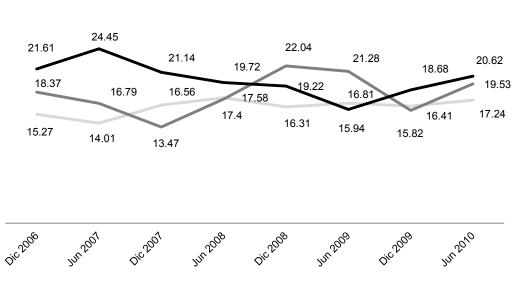
Distribución de Hospitales según naturaleza pública o privada y docente o no docente





Los Hospitales privados no docentes tuvieron una menor tasa de infecciones intra Hospitalarias en la mayoría de los periodos, frente a los Hospitales Docentes.

PÚBLICO DOCENTE



-PRIVADO NO DOCENTE

#### Figura 2 Tendencia del indicador de mortalidad intrahospitalaria

PRIVADA DOCENTE

Los Hospitales privados no docentes tuvieron en promedio una menor tasa de mortalidad intra Hospitalaria, frente a los Hospitales públicos Docentes

Tabla 2 Resultados de Índice de infecciones intrahospitalaria por tipo de Hospital acumulado 2006-2010

ESTADISTICO	PRIVADO DOCENTE	PRIVADO NO DOCENTE	PÚBLICO DOCENTE	
Suma de mínimos cuadrados (LMS)	2.3	1.62	2.2	
Ji al cuadrado	0.008	0.018	0.005	
Р	0.9271	0.89439	0.94232	

El análisis del indicador de Infección intrahospitalaria evidencia para los tres tipos de Instituciones con una significancia estadística (p<0.005) que en los últimos cuatro años este indicador ha permanecido estable y no muestra tendencia al aumento o la disminución. El resultado de este indicador evidencia además que las instituciones que tienen convenios docentes ya sean públicas o privadas, presentaron en promedio una tasa de infección Intrahospitalaria un 42% mayor que las Instituciones no docentes.

Tabla 3 Resultados indicador de mortalidad intrahospitalaria por tipo de Hospital acumulado 2006-2010

INDICADOR	PRIVADA DOCENTE	PRIVADO NO DOCENTE	PÚBLICO DOCENTE
Suma de mínimos cuadrados (LMS)	16.33	18.5	20.14
Ji al cuadrado	0.015	0.018	0.038
valor de p	0.90377	0.89332	0.84532

El análisis del indicador de tasa de mortalidad intrahospitalaria evidencia ausencia en la variabilidad de los resultados en los últimos 4 años, con una significancia estadística de Ji al cuadrado de tendencia (p<0.05), que refleja una estabilidad en el comportamiento de este indicador.

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Las empresas no solo tienen que desempeñarse adecuadamente en el sector económico en el que se desarrollan, también tienen que hacerlo en la vertiente financiera de su actividad, esto quiere decir que deben tomar adecuadas decisiones de inversión y de financiación que puedan darle una ventaja frente a sus competidores. (BREALEY, MYERS, & MARCUS, 2007)

La decisión de inversión comienza con la identificación de las oportunidades de inversión, normalmente relacionadas con los proyectos de inversión de capital. A la decisión de inversión también se le denomina decisión de presupuesto de capital. El alcance de estas decisiones inicialmente estaba enfocado únicamente a las inversiones en activos fijos. Hoy en día, estas decisiones incluyen las inversiones en activos inmateriales, como por ejemplo Investigación & Desarrollo, en publicidad y marketing de nuevos productos o la adquisición de patentes y marcas registradas. (BREALEY, MYERS, & MARCUS, 2007) En lo que a inversión se refiere, la decisión trascendental que se toma en una empresa es la referente a la determinación de su tamaño, es decir, del volumen total de activos que se utilizarán para mantener una operación eficiente, que igualmente sea rentable y genere valor agregado para los accionistas.

Las decisiones de inversión se encuentran relacionados con aspectos tan importantes como:

- El volumen de activos fijos que se desea mantener: Planta Física
- El plazo que se le concederá a los clientes para las ventas a crédito
- El crecimiento de la empresa que va relacionado con: Expectativas de crecimiento de la economía y del sector industrial en el que se desenvuelve, la reinversión de las utilidades y la rentabilidad futura que ofrece la empresa
- La proporción que maneja la empresa entre activos fijos y corrientes
- La adquisición de activos fijos a través de medios de financiación como Leasing

Estas decisiones llevan a la determinación del capital de trabajo neto operativo que requiere la empresa para su operación. (GARCIA S., 2009) Aquí empieza a desplegarse la segunda decisión crítica de la empresa: La decisión de financiación.

La decisión de financiación consiste en conseguir los recursos financieros que las empresas necesitan para desarrollar las inversiones y realizar sus operaciones. Cuando una empresa necesita recursos puede hacerlo a través de acciones con las que compromete beneficios futuros, o la devolución del dinero invertido más una tasa de interés determinada. En el primer caso, los inversores recibirían acciones y se convertirán en accionistas de una parte de la empresa. A los inversores, en este caso, se les denominan Inversores de Capital Social. En el segundo caso, los inversores son prestamistas, es decir Inversores de Deuda. A la decisión de optar por entre financiar la deuda o el capital social se le denomina decisión sobre la estructura de capital . Para la decisión de Financiación es trascendental la determinación de la estructura financiera, que se define como la proporción entre pasivos y patrimonio que se utiliza para financiar sus activos. Esta decisión tiene dos aspectos importantes:

• Utilidades: Mientras mayor sea la proporción de deuda con respecto al patrimonio, mayor será también la cantidad de intereses a pagarse y por tanto habrá una mayor presión sobre las

•

utilidades operativas, en la medida en que una disminución de éstas podría implicar incapacidad para atender el pago de intereses.

Costo de Capital: Es el costo que la empresa le implica poseer activos, y se calcula como el costo promedio ponderado de las diferentes fuentes que la empresa utiliza para financiarlos.
Es la rentabilidad mínima que deben producir los activos de la empresa. (GARCIA S., 2009)

La estructura de capital de una compañía es un elemento importante que puede impactar el valor de la misma. Obtener la relación deuda / patrimonio óptima es una tarea que en cada momento debe ser evaluada por los departamentos financieros de las empresas y por sus administradores. Es cierto que no existe una teoría única que ayude a definir los criterios para obtener la mejor estructura de capital, si existe un amplio consenso acerca de que el valor de una empresa si puede variar como consecuencia de endeudamiento por el efecto fiscal que genera y sus costos directos e indirectos. Dicho nivel de deuda debe analizarse en contexto, teniendo en cuenta no sólo las condiciones internas de la empresa y sus necesidades de caja, sino el mercado en el cual opera, su planeación estratégica y el ciclo de vida de la empresa y la industria, para poder contar a futuro con la flexibilidad financiera suficiente para tener un crecimiento sostenible. (BANCA DE INVERSION BANCOLOMBIA, 2011)

Del análisis de los cincos sectores se obtuvieron las siguientes conclusiones

- La estructura financiera de las empresas está correlacionada con el tamaño de la misma. A mayor tamaño mayor acceso a fuentes de financiación externa.
- Las empresas del mismo sector y del mismo tamaño tienden a tener la misma estructura financiera en cuanto a participación entre pasivo y patrimonio.
- La condición del sector tiende a afectar el acceso de las empresas (independiente de su tamaño) a las fuentes de financiación externas.
- Las empresas ubicadas en la ciudad de Bogotá tienen mayor acceso a las fuentes de financiación externas que las ubicadas en Medellín, Cali y Barranquilla.
- Las empresas del sector turismo, independientes de su tamaño o su ciudad de ubicación son las más intensivas en el uso de fuentes de financiación internas, especialmente el capital social.

# ANÁLISIS DEL IMPACTO DE LA FINANCIACIÓN CON BONOS EN COLOMBIA EN EL SECTOR EMPRESARIAL EN LOS AÑOS 2006 AL 2010

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El impacto de la financiación con bonos en la economía Colombiana fue positivo en el periodo 2006 al 2010, desde la perspectiva que permitió dinamizar renglones diversos de la economía y entre ellos las empresas, sobre todo aquellas que están mejor preparadas en sus aspectos financieros y administrativos, lo que les permitió realizar procesos de emisión de bonos y negociarlos con intereses cómodos y atractivos. Sin embargo, tienen que entrelazarse una serie de factores y circunstancias entre las variables económicas para que este efecto en conjunto sea positivo (PIB, inflación, crecimiento económico, etc.), es decir, la economía en conjunto debe armonizar.

Es más económico endeudarse con bonos y así financiarse a 10 o 15 años que prestarle a una entidad financiera en Colombia (Diferencias significativas).

El Sector Financiero ante la creciente emisión de bonos ha bajado gradualmente las tasas de intereses y subido un poco la de los CDTs, pues éstos han bajado notablemente. Lo que implica que el financiamiento de bonos si funciona

La importancia de la financiación con bonos radica en que le permite a una empresa obtener recursos a un costo competitivo, a través de un endeudamiento que en Colombia supera en algunos casos los cinco años y en la gran mayoría los diez años, lo que trae como consecuencia que una empresa, pueda utilizar todos sus recursos apoyados por el empréstito de muchos inversionistas (compradores de los bonos).

Llama la atención que este fenómeno de los bonos, ha generado desequilibrios en las colocaciones de las entidades y bancos del sector financiero, ya que muchas empresas optan por lanzarse al mercado de valores con resultados muy integrales, sobre todo porque la tendencia de crecimiento del Mercado de Valores en Colombia así lo expresa.

En países como Colombia, se debe buscar el dinamismo de la economía apoyado en modelos como el de la financiación con bonos, puesto que muchas Pymes por ejemplo, no están en condiciones de emitir bonos, pero si urge, que las tasas de interés del sector bancario sean más competitivas, los trámites no sean excesivos y logren una armonía para todos los elementos de la economía.

A pesar de que el Sector Financiero en Colombia es mediano, pero sólido, se ha visto afectado negativamente por el crecimiento de la emisión de acciones por ciertas empresas.

Un problema paralelo es que el Banco de la República y su junta directiva son normalmente criticados por sus baches en las decisiones de política monetaria, ello amerita que debe tener en cuenta el auge de la financiación con bonos en el caso de las empresas, pues sus políticas también han de afectar este tipo de actividades.

Luego, en el 2011, la política macroeconómica apenas está tomando el rumbo que necesitaba, es decir en Colombia se debe sostener la actividad económica proporcionando a los agentes financieros la liquidez y los créditos indispensables para consumir, invertir y producir.

En la actualidad se están gestando cambios en los modelos de emisión de bonos, en especial por parte de las empresas organizadas que buscan financiar sus proyectos, ya que éste es un mecanismo válido que cada vez más adquiere relevancia e importancia.

El lunar negro lo constituyen las Pymes, pues casi ninguna está en la capacidad de emitir bonos y normalmente poseen alto grado de iliquidez y aunque son las que más utilizan el Sector Financiero privado, deberían apostarle gradualmente a esa posibilidad. Es indudable que las Pymes, pelean con espadas de papel, ante las grandes empresas del país, ello significa que las empresas rivalizan entre sí por la preferencia de los consumidores, por las ventas, pero no son iguales las condiciones.

La economía Colombiana ha sido muy variable y poco contante en crecimiento económico, PIB, facilidades financieras, políticas monetarias en los últimos 10 años, sin embargo en el periodo de 2006 al 2010, se han gestado cambios negativos y positivos para la economía derivadas de las mismas aristas mencionadas anteriormente, uno de esos problemas es la forma en que se financian las empresas y el contexto del sistema financiero para ayudarles, de hecho, se han presentado conjeturas respecto de la ineficiencia del Estado en colaborar con el desarrollo económico de las empresas, una política fiscal y tributaria que vuelve a las empresas grandes, medianas y pequeñas ilíquidas, genera la búsqueda de nuevas alternativas de financiamiento en las mismas,

Hay que tener en cuenta que el sistema financiero privado y público en Colombia, regularmente cierra las puertas (praxis) a los nuevos proyectos tanto en empresas grandes como pequeñas, es decir niega nuevas posibilidades de negocios o expansión de las empresas cuando no se les respalda con créditos de fácil acceso y bajas tasas, pues muchas veces las vuelven inviables al no conseguir recursos, afectando gran parte del crecimiento económico y otras variables conjuntas a la situación antes planteada.

En consecuencia, el impacto de financiarse con bonos para una empresa puede ser positivo o negativo y dependerá muy seguramente de la conjugación de muchas variables, como por ejemplo, el tipo de empresa que lo emite, la confianza y seguridad de la misma, el contexto de la producción y las múltiples variables de la macro y microeconomía.

En consecuencia el articulo abordó el análisis del impacto de financiarse con bonos por parte de las empresas y como ello repercute en la economía Colombiana, se tomó como espacio temporal del análisis los años 2006 al 2010.

# EL PROGRAMA BRIGADAS UNIVERSITARIAS EMPRESARIALES EN LA FACULTAD DE CONTADURÍA Y ADMINISTRACIÓN, EN LA FORMACIÓN INTEGRAL DEL LICENCIADO EN ADMINISTRACIÓN

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#### RESUMEN

En la Facultad de Contaduría y Administración de la Universidad Veracruzana en la Zona de Xalapa Veracruz, México se imparten cuatro programas académicos los cuales son: Administración, Contaduría, Sistemas Computacionales Administrativos y Gestión y Dirección de Negocios. La Universidad Veracruzana ha operado desde 2006 a la fecha una estrategia de vinculación con el sector productivo denominado Brigadas Universitarias Empresariales. En la Facultad se implementa este programa de vinculación a partir de febrero de 2008. Dicho programa tiene como objetivo acercar a los estudiantes a las empresas con la finalidad de realizar trabajos que impacten en la productividad y desarrollo de éstas; asimismo, los estudiantes pueden conocer problemas reales en las empresas y participar activamente en su solución. La presente investigación tiene como objetivo, en una primera fase, identificar el impacto del programa Brigadas Universitarias en la Empresa (BUE) en la formación integral de los estudiantes del programa educativo de Licenciatura en Administración, en virtud del que el Modelo Educativo de la Universidad Veracruzana lo señala como parte de la formación de los estudiantes, ya que esta actividad les permite, principalmente, determinar sus fortalezas y oportunidades de mejora, así como su impacto en el perfil de egreso.

PALABRAS CLAVE: Brigadas, vinculación, empresas y estudiantes.

# THE UNIVERSITY'S BUSINESS BRIGADES PROGRAM AT THE ACCOUNTING AND MANAGEMENT FACULTY, RELATED TO THE INTEGRAL FORMATION OF THE STUDENT IN MANAGEMENT.

# ABSTRACT

In the Accounting and Management Faculty at Universidad Veracruzana in Xalapa, Veracruz Campus there are four academic programs to be taught: Administration, Accounting, Administrative Computing Systems and, Management Bussines Direction. The Universidad Veracruzana has operated since 2006 to date a strategy of linkage with the productive sector named University's Bussines Brigades Program. The Faculty has implemented this program of outreach since February 2008. This programme aims to build

**JEL**: *123,M10, Y1* 

KEY WORDS: Brigades, bonding, companies and students.

# INTRODUCCIÓN

#### La Veracruzana y el Modelo Integral De Educación Flexible (MEIF)

El objetivo del Modelo Educativo Institucional, busca formar estudiantes que den respuestas y soluciones a la problemática que estamos viviendo, ofreciéndoles mejores opciones imaginativas e innovadoras de enseñanza aprendizaje, relacionadas con la adquisición de las habilidades básicas que lo formen para un mejor desempeño personal y profesional aún después de culminados los estudios.

El Modelo integra experiencias educativas con un enfoque para la vida dentro y fuera del aula, de tal manera que los estudiantes se involucren en procesos de enseñanza aprendizaje más profundos y significativos. Además, considera la recreación, el arte y el deporte como parte de las actividades de la formación integral con reconocimiento académico.

#### Formación integral:

Existe congruencia y una relación estrecha entre los fines de la formación integral y los ejes integradores que marca el modelo; ya que los primeros, establecen los requisitos que se debe cubrir para la formación integral de los estudiantes, y lo segundos, se refieren a la forma en que van a conseguirse esos fines a través de un modelo integral flexible.

#### Formación intelectual:

Fomenta el pensamiento lógico, crítico y creativo necesario para el desarrollo de conocimientos. Desarrolla la habilidad para razonar, analizar, argumentar, inducir, deducir y otras, que le permiten la generación y adquisición de nuevos conocimientos y la solución de problemas.

#### Formación humana:

Desarrolla actitudes y la integración de valores que influyen en el crecimiento personal y social del ser humano como individuo.

#### Formación social:

Fortalece los valores y las actitudes que le permiten al sujeto relacionarse y convivir con otros.

#### Formación profesional:

Genera conocimientos, habilidades y actitudes encaminados al saber hacer de la profesión.

La flexibilidad curricular, le da al estudiante la oportunidad de decidir sobre su formación integral, dándole la oportunidad de elegir conforme a sus tiempos, intereses profesionales y características personales, los contenidos o experiencias educativas que quiere cursar.

Además, este tipo de organización académica que adopta un criterio de créditos académicos dentro de un currículum, le facilita al estudiante la movilidad entre facultades e instituciones del país y del extranjero.

La transversalidad significa, en este modelo, que todos los programas, de los cursos y experiencias educativas, en los planes de estudio de cada dependencia, están encaminados al logro de los cuatro fines propuestos por medio de los ejes y los cursos del área básica general.

#### Licenciatura en Administración

La presente investigación centra su objetivo en los estudiantes de la Licenciatura en Administración en la Universidad Veracruzana en el campus Xalapa, siendo el objetivo general de dicha licenciatura Formar profesionales competentes en la administración con conocimientos sólidos que le permitan tener una visión general para responder a los retos y expectativas de los organismos sociales, con habilidades para aplicar metodologías y técnicas que promuevan el desarrollo y con una actitud crítica y creativa en el contexto de sus valores individuales, profesionales y de la sociedad.

Se puede considerar que la administración como disciplina, conlleva la integración de diversos conocimientos relacionados con la conducta humana, tanto individual como grupal y social. Es un campo de conocimientos muy amplio, lo cual ha provocado la especialización igual que en otras profesiones, para ser expertos en la propuesta de solución de los problemas de su especialidad. Por lo tanto, el administrador debe conocer técnicas de diagnóstico que le permitan identificar y evaluar oportunidades y amenazas, problemas y soluciones, para proponer alternativas mediante decisiones oportunas y correctas que generen el estado ideal, para guiar a los elementos que intervienen, dirigiéndolos hasta encontrar la solución optima.

El trabajo del administrador profesional se nutre de la teoría, de las técnicas y prácticas administrativas y de la experiencia personal, las empresas modernas necesitan directivos que coordinen, innoven, introduzcan iniciativas, creen equipos y tomen decisiones en el marco complejo y dinámico en el que se desarrolla su actividad, es por esto que resulta indispensable durante su formación el acercamiento con estrategias de vinculación que le permitan fortalecer las áreas principales de su formación.

#### Vinculación

Las IES deben participar activamente en el estudio y comprensión de los entornos social, económico, político, cultural y ambiental en el que se encuentran ubicadas, con el firme compromiso de poner a disposición de la sociedad en general, los conocimientos, experiencias, resultados de investigación y servicios que ésta requiere para su desarrollo social, económico, científico y tecnológico.

Bajo este esquema nace el concepto de vinculación, que de acuerdo a Gould Giacomo (1997), debe entenderse como el conjunto comprensivo de procesos y prácticas planeadas, sistematizadas y continuamente evaluadas, donde los elementos académicos y administrativos de una IES se relacionan internamente entre unos y otros, y externamente con otras personas y organizaciones, con el propósito de desarrollar y realizar acciones y proyectos de beneficio mutuo que, 1) provean de servicios profesionales a colaboradores, especialmente a empresas; 2) conecten la educación superior con el mundo del trabajo, para poder así aprovechar al máximo la vinculación como herramienta educativa, de formación de recursos humanos y de actualización curricular; 3) fomenten en la investigación y desarrollo de la *base* científica y tecnológica de la IES; y 4) aumenten la competitividad de las empresas colaboradoras.

Por mencionar algunas acciones, en el ámbito académico, la vinculación contempla: innovación curricular, actualización del personal académico, desarrollo de casos piloto, apoyo financiero para tesis, material didáctico e innovación en programas de educación continua y a distancia; en el área de investigación: intercambio de información sobre avances científicos en las estructuras ocupacionales y apoyos para investigación en empresas con desarrollo de normalización de funciones productivas; y en el campo de la difusión: acceso a bases de datos, publicaciones conjuntas, organización conjunta de seminarios, talleres y conferencias y convenios de cooperación para el uso de medio de difusión.

En la Universidad Veracruzana la línea estratégica de Fomento a la Vinculación Académica fue creada con la finalidad de promover e impulsar la cultura de vinculación en la comunidad universitaria, con el fin de que generar un mayor impacto en la formación integral de los estudiantes y en el quehacer de los académicos; es decir, institucionalmente, se lleva a cabo desde las entidades académicas y dependencias de la Universidad, con la participación activa de docentes, investigadores, estudiantes, personal administrativo y funcionarios.

Para su implementación se promueve la planeación, gestión, organización, sistematización, evaluación y difusión de la vinculación, a partir de dos programas ejes articulados: a) Programa de Fomento a la Vinculación de Estudiantes: mediante prácticas de vinculación en escenarios reales de la sociedad derivadas de sus experiencias educativas, servicio social, experiencia recepcional o actividades extracurriculares bajo el enfoque de aprendizaje-servicio; y b) Programa de Fomento a la Vinculación de Académicos que eleva la pertinencia de los programas educativos y apoya las tares de investigación.



La sistematización y evaluación de la vinculación se centra en el diseño y operación de una red de comunicación mediante una herramienta tecnológica en red. Su finalidad es propiciar la comunicación e interacción entre la comunidad universitaria, así como facilitar el diálogo sistemático y permanente entre nuestra casa de estudios y los diferentes sectores de la sociedad. Esta herramienta se denomina Sistema de Información para la Vinculación Universitaria (SIVU).

#### Brigadas Universitarias

La Universidad Veracruzana en su programa de trabajo 2009-2013 contempla en el eje 3 el fortalecimiento de la vinculación tanto en el ámbito institucional como en el entorno social y productivo, con la finalidad de contribuir a la formación integral de los estudiantes universitarios. Por lo anteriormente expuesto, la Dirección de Vinculación General empezó a operar el programa de Brigadas Universitarias en la Empresa (BUE), consistente en la realización de prácticas profesionales por parte de los estudiantes, actividades que desarrollan bajo la supervisión de un tutor académico, en apoyo de los sectores productivos; tomando como referente los saberes que se trabajan en las diversas experiencias educativas que conforman los planes de estudio de las licenciatura de Administración.

El referido programa inicia en una primera fase a través del área de vinculación institucional en el año 2006, en un esfuerzo de coordinar actividades con los sectores: social y productivo.

Como se señaló líneas arriba, (Guía para coordinadores BUE 2006) "el programa se apoya en la participación de estudiantes asesorados por académicos expertos en diversas disciplinas, mediante su inserción en instituciones y/o empresas del sector productivo, con la finalidad de articular su formación profesional con el contexto real, buscando incidir en el crecimiento de dicho sector como agentes impulsores del desarrollo de Veracruz"

En el año 2008, se retoman con mayor énfasis los trabajos de vinculación a través de la Facultad de Contaduría y Administración región Xalapa y el programa de Brigadas Universitarias en la Empresa toma mayor auge, y es cuando los estudiantes de esta facultad se inserten en los diferentes ámbitos de desempeño en las empresas; de esta manera, se establece una alianza en la que el joven cumple una práctica profesional, bajo la condicionante de que el producto final tenga un impacto para la empresa receptora del servicio, así como en los ámbitos social y económico.

# **REVISIÓN DE LITERATURA**

En la literatura de la metodología de la investigación, Hernández Sampieri (2010) y la estadística, Murray (2009) se distinguen diferentes métodos para la obtención de la muestra, en esta investigación se ha considerado la muestra probabilística, en la que nos señala que todos los elementos de la población tienen la misma posibilidad de ser escogidos, esta selección será de acuerdo a las características de la población, ya que esto nos ayuda a determinar el tamaño de dicha muestra. En este proceso de selección se consideró a los estudiantes de la Licenciatura en Administración que han participado en BUE.

## METODOLOGÍA

De una matrícula de 1,067 estudiantes correspondiente a la Licenciatura en Administración, se determinó que solo el 65.6% (700) habían participado en una BUE, por lo que se calculó una muestra de 96, determinándose de la siguiente forma:

$$n = \underline{\qquad N Z^{2} p q}$$

$$e^{2} (N-1) + Z^{2} p q$$

$$n = \underline{\qquad (700)(1.48)^{2} (.5)(.5)}{(.07)^{2} (700 - 1) + (1.48)^{2} (.5)(.5)} = 96$$

n= Muestra N= Población Z= Grado de confianza p= Probabilidad a favor q= Probabilidad en contra e= Nivel de estimación de error

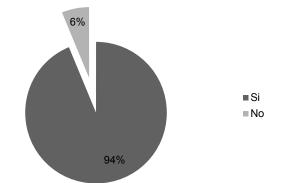
Se elaboró un instrumento de investigación que consta de 7 preguntas de opción múltiple y 4 dicotómicas, el cual se aplicó a la muestra en las instalaciones de la Facultad de Contaduría y Administración, campus Xalapa.

#### RESULTADOS

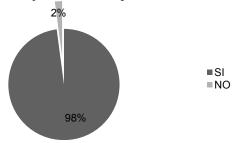
En un estudio realizado a 96 alumnos de la Licenciatura en Administración , relativo a las Brigadas Universitarias Empresariales, o también conocidas como BUE, en las cuales el 94% dijo haber tenido participación en el proceso de vinculación, así mismo el 98% dijo haber desarrollado un trabajo que estuviese acorde a la licenciatura en curso, misma razón por la cual la mayor parte de los encuestados (86%) consideró que dicha actividad tuvo como consecuencia el fortalecimiento de su perfil profesional al poder llevar lo aprendido en las aulas a la aplicación exterior.

El 22% de los alumnos consideró que durante el desarrollo de la actividad tuvieron la oportunidad de reforzar ciertas habilidades como el trabajo en equipo principalmente, seguido por el 19% que dijo haberse fortalecido más en la toma de decisiones; teniendo como consecuencia la afirmación de los conocimientos en el área de administración y recursos humanos en su gran mayoría. En sentido contrario, el 26% de los alumnos admitió que el área que más le ha costado reforzar es el área financiera, seguido por el 24% que tuvo mayor dificultad al enfrentarse al área contable de la empresa.

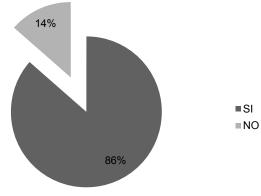
1.- ¿Has participado en el proceso de vinculación BUE?

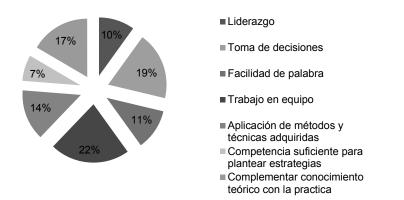


2.- ¿Desarrollaste un trabajo a corde a tu profesión?

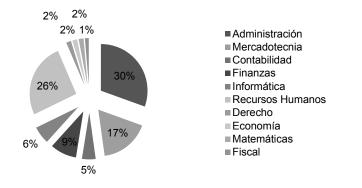


3.- ¿Consideras que participar en dicha vinculación fortaleció tu formación profesional?

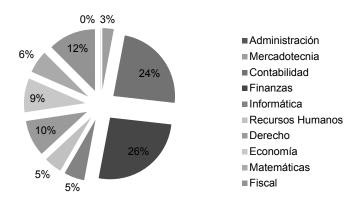


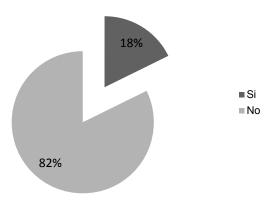


5.- ¿Cuál de las siguientes áreas del conocimiento consideras que se vieron reforzadas?



6.- ¿En qué áreas del conocimiento tuviste dificultad y consideras que debes reforzar?

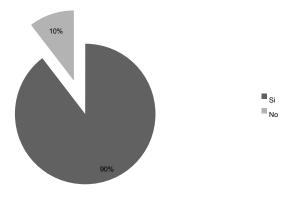




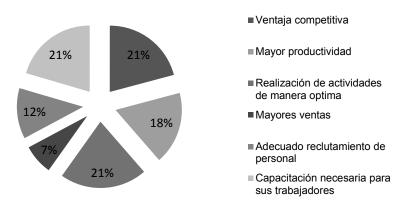
8.- En caso de ser afirmativa la respuesta anterior, menciona dos desventajas que consideres



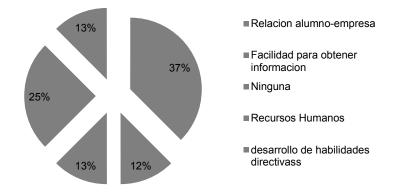
9.- ¿Tuviste apoyo del empresario al solicitarle información?



10.- ¿Qué ventajas crees que el empresario obtendrá gracias al trabajo realizado por ustedes?



11.- ¿Qué áreas de oportunidad detectas en este proceso de vinculación?



#### CONCLUSIONES

La sociedad demanda que las universidades demuestren los beneficios que proveen a la comunidad, convirtiendo a sus estudiantes en profesionales comprometidos con el desarrollo estatal y nacional; por lo que la Facultad de Contaduría y Administración de la Universidad Veracruzana realiza esta actividad a través del Sistema Universitario de Mejora Empresarial (SUME).

Como se aprecia en los resultados, esta vinculación a través de Brigadas Universitarias Empresarial ha favorecido a los estudiantes de la licenciatura en administración, puesto que les ha permitido aplicar los conocimientos adquiridos en el aula en un escenario real, ya sea del sector público o del empresarial.

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# DIAGNÓSTICO DEL NIVEL DE ESTRÉS LABORAL Y SU RELACIÓN CON EL APOYO SOCIAL PERCIBIDO EN TRABAJADORES DE LA SALUD MEXICANOS

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## RESUMEN

Este trabajo presenta una investigación de tipo descriptivo, correlacional, transversal con diseño no experimental sobre el diagnóstico del estrés laboral utilizando la escala de Demanda-Control de Karasek (1979) en una muestra de trabajadores de la salud del Hospital General de Ensenada, B.C. Su objetivo consiste en describir el nivel de estrés laboral de los trabajadores y ver si existen diferencias entre el sexo y el nivel de estrés detectado. Para alcanzarlo, se trabajó con una muestra de 146 trabajadores de la salud. La técnica para la recolección de los datos fue el cuestionario Demanda-Control con un total de 29 reactivos con escala de Likert. Los resultados obtenidos indican que el nivel de estrés de los hombres y de las mujeres, asimismo, se observa alta correlación significativa entre el nivel de estrés y el apoyo social percibido.

## JEL-M12

**KEYWORDS**: estrés Laboral, Estrés psicosocial, apoyo social, modelo de Karasek, trabajadores de la salud

## INTRODUCCIÓN

Debido a las características particulares de las instituciones de salud en México, en el personal de enfermería en general se han observado mayores consumos de alcohol, tabaco y café como respuesta a los estresores que enfrentan en su empleo. Asimismo y por la misma causa, su expectativa de vida en general es menor, existe un mayor índice de suicidios y patologías psiquiátricas entre ellos debido a su contacto diario con la muerte, los conflictos con los médicos que enfrentan, la preparación inadecuada, la falta de apoyo, el nivel de satisfacción que perciben, entre otros (Gray-Tof y Anderson, 1981; Sutherland y Cooper, 1990; Healy y McKay, 1999, 2000). Es por lo tanto, de suma importancia el estudio del estrés laboral en el personal de enfermería y su relación con otras variables que inciden en su aumento.

El estrés laboral ha sido un tema de gran interés en el mundo académico y en la investigación debido a la gran importancia que tiene por los padecimientos que genera, los altos costos que representa para las organizaciones y la alta incidencia de empleados que lo padecen. Debido a que los hospitales públicos en México presentan características que propician sucesos estresantes que se identifican directamente con el entorno laboral como las altas cargas de trabajo, las condiciones laborales, el gran número de pacientes que manejan, la falta de recursos suficientes, cambio en los hábitos de sueño o alimentación debido a jornadas mixtas o nocturnas, el contenido del trabajo y la tarea, la estructura organizacional, las fuentes de estrés extralaborales, las condiciones físicas del entorno laboral y el rol organizacional del trabajador de la salud entre otros. También se observa que el diseño de la organización, la dirección del trabajo, y el entorno socio-laboral, que tienen este tipo de instituciones de salud públicas son propicias para causar daños físicos, psicológicos o sociales a los empleados por su alta demanda de esfuerzo físico y mental al que son continuamente sometidos.

Aunque existen numerosos estudios que han analizado el Estrés laboral principalmente en Hospitales y en ambientes donde los servidores públicos manifiestan síntomas claros de estarlo padeciendo, el ambiente de los hospitales públicos mexicanos caracterizado por poco apoyo social desde los mandos superiores hacia sus subordinados y mayor apoyo desde sus compañeros, así como la mentalidad lúdica que se le asigna al trabajo desde el enfoque latino- americano, hacen que este estudio cobre gran importancia para caracterizar si estos factores tienen influencia en el estrés que desarrollan los empleados y cómo se relaciona con las diferencias individuales que presentan los empleados de la muestra (Lazarus y Cohen, 1977; De Longis, Folkman y Lazarus, 1988; Cooper, 1998; Dunham, 2001; Karasek, 1979; Karasek y Theorell, 1990; Siegrist, 1996, 1998, 2002; Siegrist y Peater, 1996; y Stansfeld y Marmot, 2002) entre otros.

Esta investigación se compone de cuatro partes: primero, se presenta una breve semblanza bibliográfica para conocer los principales modelos, teorías y hallazgos más sobresalientes sobre el tema de estudio. En segundo lugar, se presenta el método de trabajo, que incluye la descripción de la muestra, el instrumento y las pruebas realizadas a éste. Como tercer punto se presentan los resultados más sobresalientes que dan paso al diagnóstico objeto de este estudio y se analizan las diferencias individuales para detectar características que tengan relación con los niveles de estrés presentados. Por último, se presenta en la discusión un análisis de los hallazgos más sobresalientes en esta investigación que tienen similitud con otros estudios realizados, así como áreas de oportunidad futuras y limitaciones de este trabajo.

#### Breve Estudio Bibliográfico

En las definiciones del estrés Laboral se observa que en general, la mayor parte de autores lo clasifican como una enfermedad que perjudica la producción, al afectar la salud física y mental de los trabajadores cuando las exigencias del trabajo no igualan las capacidades, los recursos o necesidades del trabajador. Asimismo, cuando el individuo percibe sus condiciones como una amenaza que desborda sus recursos. (Calabrese, 2006; Lazarus y Folkman, 1986; Karasek, 1981).

Desde los años cincuenta, el estrés empezó a cobrar gran importancia por las respuestas fisiológicas que generaba en el organismo. Precursores como Seyle (1956) observaron la gran importancia que el estrés representaba en la sintomatología del paciente.

Posteriormente, una gran cantidad de investigadores se interesaron en estudiar las diferentes relaciones del estrés con su entorno (Kaplan, 1983; Engel, 1985; Martin, 1989; Paterson y Neufeld, 1989; Sutherland y Cooper, 1990; Avison y Gotlib, 1994; Quick, 1997; Kessler, 1983; Pearlin, 1983; Lester, Nebel y Baum, 1994; Lester, 1994, entre otros).

#### Estudios sobre Estrés Laboral

Guerrero, (2003) realizó un estudio sobre los roles laborales y su impacto en el estrés en el trabajo, en el cual analiza el momento de trabajo y el momento de no-trabajo. Las dimensiones que analiza son los conocimientos y habilidades del individuo, sus condiciones de género, sus expectativas ocupacionales, su estilo de vida, sus valores y patrones de crianza, su vulnerabilidad al estrés, sus estrategias de afrontamiento, las oportunidades de empleo, la diversidad de roles, el tiempo disponible para atenderlos, la naturaleza y disponibilidad de apoyo social. En su estudio encontró que el apoyo social juega un rol de gran importancia en el desarrollo del estrés.

Del Pino, (2010) realizó un estudio diferencial del estrés laboral en una actividad predominantemente masculina, encontrando que los agentes adversos y estrategias de afrontamiento fueron de gran importancia para prevenir el estrés. Fernández (2010) en su investigación sobre la influencia de los

factores estresantes en el rendimiento laboral encontró que el estrés tiene un gran impacto en la disminución en el rendimiento de una muestra de choferes de colectivos urbanos.

Posteriormente, Leal (2011) en su estudio presenta una asociación entre el estrés en el trabajo y las exigencias laborales según el tipo de contrato en un centro de trabajo dedicado a la fabricación de autopartes, encontrando gran relación del estrés con los empleados sindicalizados (obreros). Asimismo, Calabrese (2006) menciona que las dificultades para balancear la vida familiar tienen efectos en el estrés laboral que presentan los empleados al presentar falta de interés, ausentismo, errores médicos como mala praxis y problemas legales en los profesionales de la salud. Gamero (2010) presenta la evaluación que se realizó para cuantificar el comportamiento de los asalariados frente a las ausencias laborales. Las estimaciones calcularon que el estrés laboral contribuye a jornadas laborales perdidas que representan el 0.11% del PIB en España.

En un estudio realizado en Holanda, Schaufeli (1999) observa que las políticas gubernamentales y corporativas en ese país se están enfocando más a reducir los riesgos psicosociales y del estrés laboral debido a los altos costos que estos representan. Bueno y Santamaría (2008) en su estudio sobre un grupo de enfermeras en servicios de oncología observaron que las acciones que realizan las enfermeras para manejar el estrés laboral a nivel individual incluyen identificación de factores estresantes, entrenamiento en habilidades de comportamiento, cognitivas y de comunicación, y programas de recreación. A nivel grupal se identificó el trabajo en equipo y la comunicación de sentimientos.

Juárez (2007) determinó en su estudio que la tensión laboral según el modelo de Karasek y la inseguridad en el empleo se asocian significativamente con indicadores cardiovasculares, tales como la tensión arterial (TA) y los síntomas cardiovasculares (SC), considerando factores tradicionales de riesgo cardiovascular (edad, índice de masa corporal, consumo de tabaco y alcohol, entre otros) en una muestra de 109 enfermeras de un hospital de México durante el julio del 2004 donde aplicaron el JCQ.

Martín y Peiró (2007) encontraron a través de un análisis de regresión jerárquica múltiple que en aquellas situaciones caracterizadas por altos recursos se obtiene una relación positiva entre las demandas del puesto y la innovación del trabajador.

En este análisis, se observa que aunque se ha prestado una gran atención a las características físicas del contexto y a la tarea, cada vez más se ve la necesidad de incluir otras variables en el análisis del estrés: diferencias individuales, variabilidad en las expectativas y en los niveles de tolerancia, variabilidad entre las respuestas individuales al mismo estresor, entre otras.

# MÉTODO

#### Diseño del estudio

Este trabajo presenta una investigación de tipo descriptivo, correlacional, transversal con diseño no experimental sobre el diagnóstico del estrés laboral utilizando la escala de Demanda-Control de Karasek (1979). La población de estudio son los profesionales de la salud del Hospital General en Ensenada Baja California. Su objetivo consiste en describir el nivel de estrés laboral en una muestra de trabajadores de la salud de dicha institución y ver si existen diferencias entre el sexo y el nivel de estrés detectado. Para alcanzarlo se trabajó con una muestra de 146 trabajadores. Para la recolección de los datos se utilizó el cuestionario Contenido del Trabajo de Karasek (1997) con un total de 29 reactivos con escala de Likert.; su confiabilidad fue determinada a través del alfa de Cronbach, obteniendo un índice de 0.75.

#### Diseño del Instrumento:

Para medir el estrés psicosocial (las demandas, el control sobre el trabajo y el apoyo social) se utilizó la versión del cuestionario Contenido del Trabajo de Karasek (1997) el cual consta de 29 ítems. El cuestionario consta de 9 ítems sobre demandas, 10 ítems de control sobre el trabajo y 10 ítems de apoyo social. Maneja 4 opciones de respuesta: totalmente de acuerdo, de acuerdo, en desacuerdo, totalmente en desacuerdo.

#### RESULTADOS

En el tratamiento estadístico de la información se utilizó el paquete *Statistical Package for the Social Siences* (SPSS) ® para obtener, estadísticos descriptivos, las correlaciones Spearman, la fiabilidad del instrumento y la prueba *t-student*.

Para determinar el nivel de estrés se empleó el baremo de intensidad mostrado en la Tabla YY; este baremo se construyó en función del número de ítems medidos en escala ordinal, en donde cada pregunta tiene cuatro alternativas (1 al 4) y considerando que solo existe una alternativa de respuesta para cada ítem.

Tabla YY: Baremo de Intensidad para la determinación del Nivel de Estrés

R	ango	Nivel			
0 -	<b>→</b> 29	Muy bajo			
30 _	58	Bajo			
59	87	Alto			
88	116	Muy alto			
La plantilla se integ	gró por 29 ítems, en d	onde cada ítem tiene 4 alternativas (1 al 4) de respuesta			
(Likert), cada respo	ondiente debe seleccion	ar sólo una respuesta para cada ítem, por tanto el valor			
máximo por cuestionario es 116, con base en esto, se establecieron los intervalos de puntuaciones					
indicados en este baremo, haciendo una partición equitativa de dicho rango. Fuente: Elaboración					
propia					

Con la finalidad de determinar la existencia de diferencias de género en la variable nivel de estrés en la muestra de trabajadores de la salud, se ha utilizado la prueba t de diferencias de medias para muestras independientes.

Antes de pasar a la determinación de las diferencias entre el nivel de estrés y el sexo de los trabajadores, se comprobó el cumplimiento de los requisitos para la aplicación de las pruebas paramétricas, recurriendo para ello a la identificación de la normalidad de los datos a través de la aplicación de la prueba de Kolmogorov-Smirnov. La hipótesis estadística (Ho) fue "la el nivel de estrés puede modelarse con una distribución normal".

La Tabla TT muestra que el nivel p para la prueba de Kolmogorov-Smirnov es no significativo (esto es, p>0.05) por tanto no es posible rechazar la hipótesis, lo cual indica que los datos siguen una distribución normal.

#### Tabla TT: Pruebas de normalidad

	Kolm	ogorov-Smirnc	0V <sup>a</sup>	S	Shapiro-Wilk	
	Estadístico	Estadístico gl Sig.			gl	Sig.
ESTRES	.078	146	.029	.985	146	.121

a. Corrección de la significación de Lilliefors

Dado lo anterior para determinar las diferencias entre la variable estrés y el sexo de los trabajadores se aplicó la prueba *t-student* cuyos resultados se presentan en los siguientes párrafos. Previo se determinaron los indicadores estadísticos; en la Tabla WW muestra para hombres y mujeres: la media, varianza, desviación estándar, máximo, mínimo, límite inferior y superior, mínimo y máximo.

#### Determinación del nivel de estrés global

El nivel de estrés se determinó comparando el puntaje obtenido contra el baremo de intensidad (Tabla YY) construido para tal fin. El análisis reveló que el promedio de puntaje en esta evaluación fue de 59.47 por tanto el nivel de estrés que existe entre los trabajadores de la salud es alto. Además se observa que el nivel de estrés es muy semejante entre hombres y mujeres (Tabla WW).

#### Determinación del nivel de estrés por categorías

También se analizó el nivel de estrés por categorías encontrando que el 58.5% de las mujeres tienen un nivel alto de estrés mientras que el 56.8% de los hombre presenta este nivel (Tabla JJ).

Sexo	Nivel	Frecuencia	Porcentaje
Femenino	Bajo	44	41.5
	Alto	62	58.5
	TOTAL	106	100.0
Masculino	Bajo	16	43.2
	Alto	21	56.8
	TOTAL	37	100.0

Tabla JJ. Estrés en cuatro categorías

En esta tabla se presentan los niveles de estrés por categoría según el sexo de los trabajadores. En ella se observa que las mujeres poseen un mayor nivel de estrés con relación a sus compañeros hombres.

#### Determinación de diferencias entre el sexo de los trabajadores y su nivel de estrés

De acuerdo con los datos presentados en la Tabla RR, la prueba U de Mann-Whitney presenta un valor de U de 1953.00 con una significancia asociada de .971 la cual es mayor respecto al umbral de significancia establecido de 0.05; de donde se concluye que no existen diferencias significativas entre el nivel de estrés de los hombres y de las mujeres.

#### Tabla RR: Prueba de U Mann-Whitney

	Nivel de Estrés en los trabajadores de la salud	
Mann-Whitney U	1953.000	
Wilcoxon W	2656.000	
Z	037	
Significancia asintotica	.971	
La tabla nos muestra el valor de U	J tiene un valor p asociado de 0.971	
mayor al nivel de significancia de 0.05 por tanto el nivel de estrés ent		
hombres y mujeres no es distinto	*	

Determinación de la correlación entre las variables Control-Exigencias del Trabajo-Apoyo Social

Para valorar la asociación entre las variables Control-Exigencia de Trabajo-Apoyo Social se decidió calcular el coeficiente rho de Spearman. Este coeficiente es una medida de asociación lineal que utiliza los rangos, números de orden, de cada grupo de sujetos y compara dichos rangos (Martínez, et al, 2009). De los resultados obtenido (Tabla PP) se concluye que la correlación entre la variable dependiente (Nivel de estrés) y las variables Apoyo Social y Control es entre moderada y fuerte mientras que con la variable Exigencia de trabajo es débil de acuerdo a lo señalado por Martínez, et al. (2009). Además, se encontró que las correlaciones entre las variables independientes son débiles en el caso de Apoyo Social y Control (r=.300); y, nulas entre las exigencias de trabajo y las variables Control y Apoyo Social (r=.038 y r= -0.44).

			ESTRES	CONTROL	EXIGENCIAS	АРОҮО
Rho Spearman	de ESTRES	Coeficiente de correlación	1.000	.700**	DEL TRABAJO .410**	SOCIAL .762**
	CONTROL	Sig. (bilateral) Coeficiente de	.700**	.000 1	.000 .038	.000 .300**
	EXIGENCIA	correlación Sig. (bilateral) Coeficiente de	.000 .410**	.038	.645 1	.000 044
	S DEL TRABAJO APOYO	correlación Sig. (bilateral) Coeficiente de	.000 .762**	.645	044	.595 1
	SOCIAL relación es significativa a slación es significativa al		.000	.000	.595	

#### Tabla PP. Correlaciones

RANGO			RELACIÓN
0.00	а	0.25	Nula o escasa
0.26	а	0.50	Débil
0.51	а	0.75	Entre moderada y fuerte
0.76	а	1.00	Entre fuerte y perfecta
Fuente: Ma	artínez, et al. (	2009	

Tabla XX. Valores para la interpretación del Coeficiente de Spearman

#### DISCUSIÓN

En esta investigación se pudo observar que el nivel de estrés que existe entre los trabajadores de la salud encuestados es alto. Además se observa que el nivel de estrés es muy semejante entre hombres y mujeres. Asimismo, se pudo observar que el apoyo social tiene una alta correlación con el estrés. Al igual que en estudios previos como el de Pérez, López, y Díaz (2001), la falta de apoyo social ha sido una variable que manifiesta ser de gran importancia para el control y reducción del estrés en esta profesión.

La Escala de Estrés utilizada ha resultado un instrumento válido y fiable para la medida de la frecuencia de las fuentes de estrés en enfermería que aparecen en el trabajo en el ámbito hospitalario.

Los estadísticos descriptivos de los ítems en nuestra muestra son similares a los de la muestra original de los autores del instrumento. También para ellos, el apoyo social ha sido asociado al nivel de estrés que presenta la muestra.

#### Oportunidades de estudios futuros

Se recomienda realizar un estudio posterior con muestras más amplias de varios hospitales, y con muestras de ámbitos diferentes al hospitalario, así como incluir medidas de intensidad de los estresores, de respuesta al estrés, de estrategias de afrontamiento y diferencias individuales.

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# EL CLUSTER FORESTAL COMO ESTRATEGIA DE INNOVACIÓN PARA UNA EMPRESA COMUNITARIA EXITOSA

Francisco Javier Castro Sánchez, Universidad Michoacana de San Nicolás de Hidalgo Oscar Hugo Pedraza Rendón, Universidad Michoacana de San Nicolás de Hidalgo

#### RESUMEN

El presente trabajo tiene el propósito de analizar el proceso que tuvo la evolución para crear un cluster forestal en la comunidad indígena de Nuevo San Juan Parangaricutiro, ubicada en el Estado de Michoacán, México, lo que hoy se reconoce como una Empresa Forestal Comunitaria modelo a nivel internacional, en la que se ha logrado la integración de varias empresas exitosas que tienen en la innovación del aprovechamiento del recurso forestal y organización comunitaria el sustento de un desarrollo sustentable con impacto en lo social, económico y ambiental.

PALABRAS CLAVE: Cluster, innovación, recurso forestal.

# AS THE FOREST CLUSTER INNOVATION STRATEGY FOR A SUCCESSFUL COMMUNITY ENTERPRISE

# ABSTRACT

This paper aims to analyze the evolution process was to create a forest cluster in the indigenous community of Nuevo San Juan Parangaricutiro, located in the State of Michoacan, Mexico, which is now recognized as a model Community Forest Enterprise international level, which has been the integration of several successful companies that have innovation in exploiting the forests and the livelihoods of community organization sustainable development with impact on the social, economic and environmental.

#### **JEL:** M15

KEYWORDS: Cluster, innovation, forest resource.

# INTRODUCCIÓN

En México, el impulso para la creación de cadenas productivas y *clusters* en el sector forestal ha sido una estrategia que no ha sido dimensionada en el valor que tiene sus contribuciones en las empresas forestales y por consecuencia en los habitantes de este tipo de zonas, ¿será por lo incierto del proceso organizacional?, ¿por los niveles de conflicto existentes en el entorno? o ¿por ser un proceso que demanda condiciones endógenas de los interesados? Al respecto, es importante destacar los procesos y logros de empresas forestales comunitarias en las que el *cluster* ha sido una estrategia innovadora en su organización con impactos favorables en lo social, económico y ambiental.

El logro de algunas comunidades forestales para generar un entorno favorable para los *clusters* contrasta con las condiciones no propicias para fomentar el impulso de empresas forestales que contribuyan en desarrollo de ejidos y comunidades que habitan zonas forestales. Es de mencionar que en México existen indicadores que derivan conclusiones de que aún hay mucho por hacer, construir y fortalecer para el impulso de estrategias que contribuyan en la creación y mejoramiento de empresas forestales que se demanda por diversos sectores sociales, por ejemplo en el Programa Estratégico Forestal para México

2025, eje rector que aporta acciones prioritarias hacia un desarrollo sustentable en el país, señala que en las áreas forestales habitan 12 millones de personas afectadas en su mayoría por la pobreza extrema y la migración, precisando que estos mexicanos no han sido apoyados en forma consistente para aprovechar racionalmente sus recursos (Atlas Forestal de la Semarnap, 1999, citado por la SEMARNAT-CONAFOR, 2001:15-16).

Las condiciones que conforman el sector forestal tienen elementos particulares que deben ser analizados conforme a su entorno, ya que, además de lo referido en el párrafo anterior, el hecho de que aproximadamente el 80% de la superficie forestal se encuentra en posesión de ejidos y comunidades (INE-SEMARNAT, 2010), determina la necesidad de contemplar estrategias institucionales congruentes a dicho entorno, y tener en claro que lo que pueda funcionar o ser aplicable en algún espacio del área geográfica forestal no necesariamente será factible en otro.

En tal sentido, asumiendo que existen ejemplos de *cluster* de empresas forestales que deben ser replicadas en lo que sea posible, si se toma como punto de partida que su definición esta dada como la agrupación de empresas y su correspondiente especialización en determinadas actividades productivas para favorecer ventajas competitivas (Porter, 1990, citado por Mitxeo, Idigoras, & Vicente, 2004:56), es de hacer referencia que bajo este enfoque, en la Comunidad Indígena de Nuevo San Juan Parangaricutiro (CINSJP), ubicada en el Estado de Michoacán, México, se ha constituido una empresa forestal exitosa que ha logrado impulsar procesos innovadores en el aprovechamiento, industrialización y comercialización de su recurso forestal con primacías en su quehacer (Barton y Merino, 2004, citados por Castro, 2012:34).

Al respecto y de acuerdo a las condiciones en las que ha sido instituida esta empresa surgen reflexiones en cuanto a ¿qué elementos del *cluster* han formado parte de la evolución de dicha empresa?, lo cual permite orientar líneas de análisis que son el propósito del presente trabajo en cuanto a que se pretende establecer el proceso que dio origen al modelo de *cluster* de empresas forestales en la comunidad, analizando su contribución y mejora de su competitividad.

#### **REVISIÓN LITERARIA**

En los años noventas se hacia referencia de que entre las empresas miembros de un *cluster*, la competencia se produce como consecuencia de la capacidad innovadora de las empresas; es decir, la competencia derivada de la creación de nuevos productos, el desarrollo de nuevas tecnologías, la detección de nuevas necesidades, las nuevas formas de organización y gestión, entre otras. No obstante, esta necesidad de mantener un equilibrio entre competencia y cooperación, es considerada a su vez, como uno de los principales inconvenientes de este tipo de agrupaciones, ya que la existencia de desequilibrios constantes provocaría reacciones que podrían romper el funcionamiento del *cluster* (Dei Ottati, 1996:90).

La definición de este concepto fue extendido por la aportación de Michael Porter en 1990 con su libro *"The Competitive Adventage of Nations"*, quien lo define como la concentración de empresas, instituciones y demás agentes, relacionados entre sí por un mercado o producto, en una zona geográfica relativamente definida, de modo de conformar en sí misma un polo de conocimiento especializado con ventajas competitivas (Porter, 2007:72).

Es de mencionar que existen análisis que expresan su coincidencia con otros términos, tales como el de Distrito Industrial, Sistemas Productivos Locales, *Milieux, Microcluster o Redes de Empresas*, entre los cuales, a pesar de sus diferencias se comparten las dimensiones básicas siguientes: la territorial, la sectorial y la cooperativa (Vila, Ferro y Rodríguez, 200, citados por Mitxeo, Idigoras, & Vicente, 2004:56-57).

Siendo que no es el propósito del presente trabajo profundizar en dicha variedad terminológica y conceptual, el término contiene aspectos que comprende la integración de empresas, en este caso forestales, que contribuyen en el valor agregado de productos pertenecientes a un campo específico, con características comunes y complementarias entre sí. Con base a estos aspectos y tomando como caso la CINSJP, el presente trabajo ha orientado elementos de análisis a partir de la evolución que han tenido las condiciones de elementos desagregados para la creación y fortalecimiento de cadenas productivas que actualmente han dado sustento al *cluster* de una empresa forestal.

¿En que momentos se debe impulsar la creación de un *cluster*?, ¿Cuáles son las razones que orientan esa necesidad?, ¿Es aplicado exclusivamente a un entorno de empresas formalmente ya establecidas o puede darse en otras condiciones?, al respecto pueden darse diversas referencias, pero de alguna manera los objetivos que se pretenden lograr mediante la estrategia de los *clusters* orientan la reflexión de las respuestas que puedan darse al respecto. En ese sentido, por ejemplo, algunos de los objetivos que se pretenden son (Michel Porter, 1990, citado por Luciano, 2010:36):

- a) Aumento de la productividad
- b) Impulso a la innovación
- c) Estimulo nuevas empresas
- d) Reducción de comportamientos oportunistas
- e) Aumento de la presión de coordinación

Lo anterior lleva a tener la idea de que no existen elementos que tengan que servir como modelo para poder generar un proceso que permita identificar, definir, describir y/o hacer operativo un *cluster*, de tal manera que los agentes interesados son quienes establecen el entorno que sustenta el proceso para su creación y mejora.

### METODOLOGÍA

El proceso desarrollado para el presente trabajo ha sido tanto inductivo como interpretativo. Para tal efecto se ha partido de un fenómeno de erupción de un volcán sucedido en la comunidad indígena de Nuevo San Juan Parangarcituro, a partir de lo cual se modificó tanto su estructura socioeconómica como la dinámica de su tejido social. Estableciéndose condiciones que dieron génesis a un exitoso vínculo social-ambiental desde los años setentas del siglo pasado hasta nuestros días. La información obtenida ha sido generada tanto de observaciones efectuadas en la comunidad como de datos disponibles en documentos de investigación y publicaciones relacionadas a esta comunidad.

Es de mencionar que fueron definidos escenarios del proceso de evolución de las actividades productivas desarrolladas en la comunidad, y efectuada una identificación-relación de las variables que han formado parte del vínculo entre los habitantes locales y el recurso forestal para crear las empresas que forman parte del *cluster* forestal generado en la comunidad.

#### RESULTADOS

Para la conformación de las empresas forestales en la comunidad se orientaron estrategias de trabajo que integraron procesos de transformación y aprovechamiento de los recursos forestales con sustento en el vínculo innovador existente entre los comuneros, el recurso forestal y la industria; de tal manera que, para establecer una relación entre los elementos teóricos que aporta Michael Porter en su definición de *cluster* con la evolución que ha tenido el modelo de trabajo que ha existido entre la comunidad y el recurso forestal, fue necesario identificar las condiciones y agentes que han formado parte de este proceso y que han sido ejes de análisis en investigaciones llevadas a cabo por Silvia Bofill (2002; 2002<sup>a</sup>; 2005); Claudio Garibay (2005; 2007); David Barton y Leticia Merino (2004); y Francisco Javier Castro (2012), así como por García & Rojas (1999) en los que pueden ser identificados los escenarios siguientes:

Figura 1: Actividades de los habitantes locales



En esta figura se muestran dos de las principales actividades de los habitantes de la comunidad en torno al año de 1943. Dichas actividades fueron realizadas de manera intensiva antes de la erupción del volcán. Dichas actividades fueron principalmente la agricultura para autoconsumo, y las actividades forestales, que se desarrollaban en el bosque para la obtención de leña, frutos y madera que usaban en diversos instrumentos domésticos y de labranza. Fuente: Elaboración propia.

- a) Primer escenario (Figura 1). Definido antes del año de 1943, en que hizo erupción el volcán Paricutín. Periodo en el que las principales actividades de los habitantes locales estuvieron destinadas hacia la agricultura. Al bosque se recurría solo para obtener madera con fines domésticos, de alimentación y actividades pecuarias.
  - b) Segundo escenario (Figura 2). Periodo posterior al año de 1943, en el que la actividad agrícola fue abandonada por no tener tierras aptas. Sus actividades estaban destinadas a emigrar a Estados Unidos con apoyo de programas gubernamentales y ser guías de turistas en la propia comunidad, así mismo desarrollaron actividades para la obtención de resina, pero como paralelamente fue generada demanda de madera por el impulso dado a la construcción de las vías ferroviarias, se dio como resultado un modelo empresarial en el que la estructura de trabajo ubicó a los comuneros como empleados y vendedores de madera en píe, es decir aún sin derribarse. La tecnología, la inversión y los patrones tenían características exógenas, los habitantes locales fueron empleados que aportaron su mano de obra en el derribo y maniobras de extracción y flete de trozas de madera. No existían beneficios derivados del valor agregado de los productos forestales ni del dilema que generaba la sobre-explotación del recurso forestal fue motivo de preocupación.

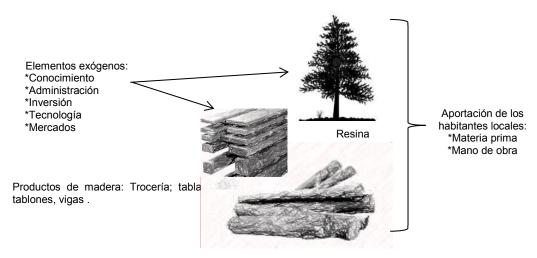


Figura2: Elementos presentes en las actividades posteriores al año 1943

En la figura se hace referencia a los elementos que formaron parte de las actividades de los habitantes locales después de que dio lugar la erupción del Volcán Paricutín en el año de 1943. La actividad agrícola ya no fue prioritaria debido a que con el impulso dado a la introducción del ferrocarril se dio el fenómeno de que la demanda de madera se incremento y se requirió de bastante mano de obra de habitantes de la región. Lo que marco este escenario fue que las acciones estaban determinadas por elementos exógenos a la región. Funte: Elaboración propia.

Tercer escenario (Figura 3). Contexto que marca una orientación definitiva, generada a mediados de los años setentas y se extiende hasta los tiempos actuales en razón a la diversificación de empresas creadas y el impulso de mejoras. Periodo en el que se identifican elementos que permitieron impulsar un *cluster* forestal con base en procesos de innovación social, ambiental e industrial que modificó el modelo de trabajo anterior sustancialmente al pasar de lo exógeno a lo endógeno. El modelo consistió en el establecimiento de un estrecho vínculo social-forestal como cimiento para la génesis del sistema empresarial forestal comunitario y la incorporación de innovaciones industriales en los que se privilegio a los habitantes locales y al medio ambiente por encima del aspecto económico. La evolución de las innovaciones incorporadas pueden ser observadas en las ilustraciones siguientes, en las que se da referencia de los elementos de cluster empresarial.

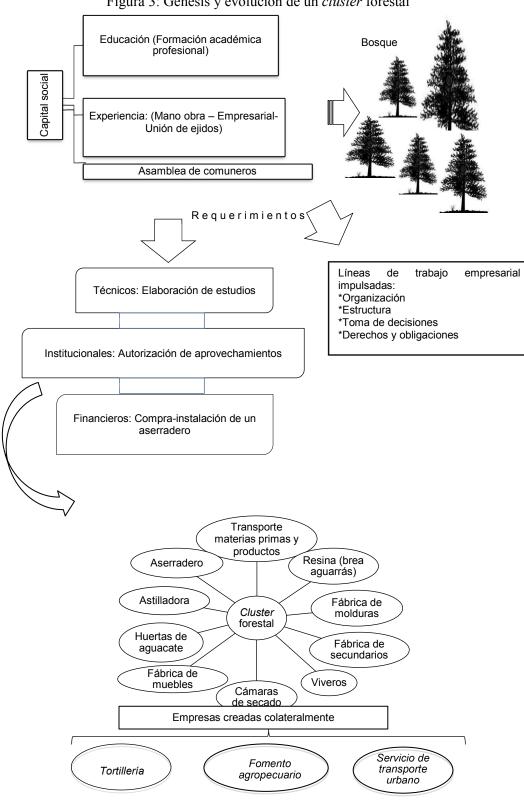
#### CONCLUSIONES.

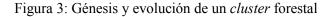
En el proceso de desarrollo que ha tenido la CINSJP, se detecta el hecho de que se tuvo como punto de partida una dinámica de actividades productivas y de relaciones sociales diferentes a como se encuentran establecidas en la actualidad. Es de mencionar la condición de que el recurso forestal ha sido un elemento central en este proceso, ya que su aportación ha pasado de cubrir necesidades mínimas a ser un eje concentrador de empresas que generan empleo, ingresos, bienestar social y conservación ambiental.

En la comunidad existió una estructura social que no tenía incidencia en las actividades productivas de los habitantes locales más allá de atender principalmente tradiciones inherentes a su cultura, y que su vínculo con sus recursos naturales estaba limitado mayormente a trabajar la tierra para obtener algunos de los alimentos que formaban parte de su dieta. En ese contexto su vínculo con los recursos forestales no representaba mayor esfuerzo ni aportación a las demandas de sus principales necesidades, que en esos tiempos, es decir antes de la erupción del volcán Paricutín, se circunscribían a los alimentos, vestido y vivienda principalmente.

Conforme transcurrió el tiempo, y en virtud de factores como la demanda de madera, empleo e ingresos por su aprovechamiento, los habitantes locales orientaron sus actividades y mano de obra en los procesos de abastecimiento e industrialización del recurso forestal, de ella cabe resaltar las características exógenas de esta actividad productiva. Condición que llevó a los comuneros, a analizar los elementos que estaban en el escenario y detectar que no estaban obteniendo los beneficios esperados, además de que su recurso forestal estaba siendo explotado irracionalmente.

Se identifica el interés de los comuneros por establecer acciones innovadoras tendientes a integrar un equilibrio entre los habitantes, el medio ambiente y la industria, otorgando prioridad a los aspectos sociales y ambientales por encima de los económicos, sin perder el sentido de generar características de competitividad de su industria forestal en torno a las condiciones en que se encuentran las demás comunidades de su entorno regional.





En la figura anterior se hace referencia a los elementos que conformaron las bases para el impulso del vínculo social-forestal: la educación, la experiencia y la autoridad representada en al Asamblea de Comuneros, así como el bosque. A partir de ello lo que se orientaron líneas de trabajo y la atención de requerimientos para impulsar el aprovechamiento forestal como: la elaboración de estudios técnicos, el apoyo institucional de las dependencias de gobierno y los recursos económicos. Lo cual, al paso del tiempo permitió la creación de un cluster por la diversificación empresarial forestal de manera vertical y horizontal. Fuente: Elaboración propia.

Por las condiciones de competitividad sustentadas en las innovaciones incorporadas en el sistema productivo de la empresa forestal, es de resaltar la importancia del papel que ha tenido: el vínculo socialambiental a partir de la dinámica de su gobernanza, la demanda de productos forestales y las condiciones para la disponibilidad de fuentes de abastecimiento; y, la integración industrial vertical-horizontal del sistema productivo.

Tomando de manera literal la definición que le da Michael Porter al término *cluster*, es de mencionar que las condiciones actuales en las que funciona la empresa forestal en la CINSJP comprende los elementos tanto de integración de empresas como el hecho de que se ha buscado y logrado obtener ventajas competitivas en el sector en el que se desempeña, que en este caso es el forestal.

A la forma de trabajo en este *cluster* forestal se le deben de añadir otro tipos de elementos que no necesariamente son "empresas" vistas como negocios, pero si es de resaltar el papel que en este proceso han tenido diversas instancias gubernamentales y académicas en el transcurso del tiempo así como el peso específico que ha tenido de manera endógena la organización y toma de decisiones que orientan los comuneros a través de la Asamblea de Comuneros, la cual se ha erigido como una forma de gobernanza eficiente.

Interesante en este proceso de evolución han sido las ventajas competitivas en los resultados económicos, ya que se ha logrado establecer un circulo de relación entre elementos que contribuyen en el abastecimiento y procesos de transformación, así como en la formación de capital humano que lo sustentan en la calidad de la materia prima, industrialización, productos y precio de venta, disminución de los costos de la materia prima, innovación tecnológica, capacitación y formación profesional, y generación de sus propios directivos y empleados, además de que:

- a) Se obtienen mejores resultados que las empresas ubicadas en forma dispersa en otras áreas forestales.
- b) La estructura de organización aporta beneficios en términos de que ellos mismos forman parte de las decisiones, son empleados y obtienen beneficios tanto económicos como de apoyo a la conservación y aprovechamiento de su recurso forestal.
- c) Existe un estrecho vínculo con instancias oficiales para atender lo relacionado a la normatividad, innovación y apoyo financiero que contribuya a mejorar su competitividad.
- d) Los productos que se obtienen, además de abastecer a otras áreas y empresas que aportan valor agregado, tienen niveles elevados de competitividad en precio y establecimiento de sistemas de comercialización más eficientes.

Derivado del análisis efectuado en el presente trabajo es de recomendar la revisión y mejora de equipos, maquinaria, capacitación y mercados que respondan a la innovación y competitividad que se demanda en los tiempos actuales. Además, no menos relevante, están varios aspectos innovadores que deben ser orientados para que el *cluster* forestal contribuya no solo en lo local sino también en lo regional, como por ejemplo:

- a) Ser un eje en torno al cual se generen sinergias para contribuir en el impulso de desarrollo de otras comunidades que se encuentran en bajas condiciones del vínculo social-ambiental-industrial,
- b) Generar un centro de capacitación en el que personas de otros lugares similares reciban una formación técnico-empresarial,

- c) Establecer un vínculo formal permanente con instituciones de investigación que permita visualizar líneas de trabajo orientadas a fortalecer el *cluster* forestal con una visión de sustentabilidad,
- d) Vincularse con otras comunidades con *cluster* forestales exitosos, locales, nacionales o internacionales, que fomente y contribuya a la búsqueda y logros de fuentes financieras para la capacitación, actualización de equipo y procesos, diversificación de mercados, desarrollo de líneas de investigación tecnológicas de la madera y del recurso forestal, para ser más competitivos en el ramo.

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# PROCESO DE MEDICIÓN EN LAS ACTIVIDADES DE INVESTIGACIÓN

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### RESUMEN

El Proceso de Medición en las actividades de investigación permite estructurar de manera eficaz el procesamiento, análisis, y recolección de información sobre nuestras variables en estudio. Este proceso permite asociar las variables e identificar la fuerza de interrelación entre las mismas. A través de la investigación cuantitativa se determina el grado de asociación de las variables para realizar una inferencia con datos concretos y reales tomados de una muestra. En el proceso de medición se deben conocer los tipos de escalas paramétricas y no paramétricas que la estadística toma como apoyo para manipular las herramientas de cálculo y a la vez brindar una interpretación de los datos recolectados. Así mismo el instrumento de medición debe estar acorde a la teoría científica que interprete el fenómeno en estudio.

**PALABRAS CLAVE**: Proceso de Medición, tipos de escalas, instrumento de medición, variables, pruebas estadísticas.

# **MEASUREMENT PROCESS RESEARCH ACTIVITIES**

#### ABSTRACT

The measurement process in the research activities allows to effectively structure the processing, analysis, and data collection of our variables being studied. This process allows the association of variables and identifies the interrelation between them. The degree of association of the variables in quantitive research is determined to develop an inference with concrete and real data taken from a sample. In the measuring process, the type of parametric and non parametric scales that statistics take as a support to manipulate the calculus tools and at the same time offer the interpretation of collected data, has to be known. In the same way, the measurement instrument has to be in accordance to the scientific theory that interprets the event being studied.

**JEL**: C01, C05

**KEY WORDS**: The measurement process, type of scales, instrument of measurement, variables, statistical tests.

## INTRODUCCIÓN

El proceso de medición en la investigación es de vital importancia, el valor de la investigación no depende de la confirmación de la hipótesis formulada o del logro del objetivo, sino de los esfuerzos desplegados para medir indicadores validos, fieles y precisos (Giroux, Tremblay, 2002). La interacción entre el investigador, el instrumento de medida y el objeto de estudio, con las diferentes categorías, técnicas o niveles de medición, conducen hacia la estadística y a las diferentes pruebas que son fundamentales para: analizar, estructurar y mostrar un resultado en la investigación.

Una visión entre el comportamiento de dichos elementos son objeto de reflexión en el proceso de medición en la investigación; éstos, tienden a ser fundamentales para identificar las características del

proceso de la medición, de tal forma que entre las variables se llegue a la detección de los instrumentos a utilizar para la recopilación de datos, y así calcular las pruebas estadísticas mas acordes al tipo de investigación a realizar. No solo se trata de registrar las mediciones; es necesario que estas midan lo que se supone deben medir, que den siempre la misma lectura de la realidad y que esta lectura sea suficientemente matizada (Giroux et al, 2002), este proceso trata de describir alguna clase de fenómeno causa-efecto a través de un modelo de pruebas estadísticas descriptivas. El analizar el modelo a utilizar, se convierte en el punto de partida para detectar el rumbo a la investigación. El objetivo que se busca en este trabajo es reflexionar acerca de la importancia y la función del proceso de Medición en la Investigación Científica enfocada a las ciencias Administrativas; esto es la ocupación en el quehacer de la investigación entorno a la Administración.

#### DESARROLLO

#### **CONCEPTUALIZACION DE LA MEDICIÓN**

Comencemos por una sencilla pregunta, ¿Qué es medir?, según refiere Hernández, Fernández, Baptista (2006) a Stevens, 1951, medir significa "asignar numerales, números y otros símbolos a propiedades empíricas conforme a ciertas reglas". En la definición de Stevens existen tres elementos que se deben explicar; numerales, asignación y reglas; los primeros se utilizan para etiquetar objetos o personas, solo para identificar a la unidad, pero si deseamos hacer descripciones estadísticas, explicar un suceso o predecirlo entonces hablaremos de valores cuantitativos, es decir, los numerales se convertirán en números para realizar las operaciones matemáticas. El segundo elemento de asignación se refiere al mapeo, el cual pretende agrupar mediante la asignación de un número a figuras o elementos semejantes en grupos, para lograr de esta manera una identificación sencilla de los conjuntos, el tercer elemento denominado la regla, son los componentes más significativos de la medición, esta asignación debe contener una relación empírica con la realidad, es decir, la creación de una frase o una oración que cuente con un valor en número que agrupe las acciones o definiciones de un objeto en particular.

Para obtener una mejor clarificación del concepto, sería importante conocer algunas definiciones de varios autores, los cuales se presentan en la Tabla No. 1.

AUTOR	OBRA	AÑO	CONCEPTO
Mohammad	Metodología de la	2010	La medición es el proceso mediante el cual se prueben las hipótesis
Namakforoosh	Investigación		y las teorías.
Hernández,	Metodología de la	2006.	Proceso que vincula conceptos abstractos con indicadores
Fernández, Baptista	Investigación		empíricos.
Luis Arturo Rivas	¿Cómo hacer una tesis de	2006.	Una medición es una guía o norma que se usa como referente para
Tovar	maestría?		medir algo.
Mario Bunge	La investigación científica, su estrategia y su filosofía.	2002	Lo que puede observarse directa o indirectamente son algunos rasgos de alguna cosa concreta. Para ser precisa, la observación tiene que ser cuantitativa, porque los objetos concretos tienen propiedades cuantitativas, aunque no sea más porque existen en determinadas cantidades y en el espacio-tiempo. La observación cuantitativa es la medición. Siempre que se atribuyen números a ciertos rasgos sobre la base de la observación se están practicando mediciones.

Tabla No. 1 Conceptos básicos de Medición.

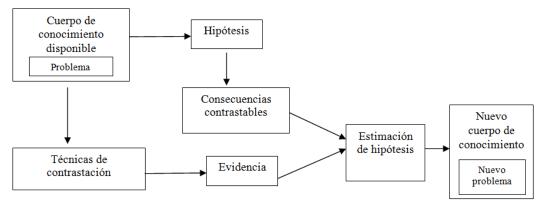
Fuente: Creación propia.

Una vez definidos los términos y conceptos que integran la medición, tendríamos que preguntarnos ¿Que es el conocimiento científico y el conocimiento ordinario?; para Bunge (2002), el inicio de toda investigación se encuentra en el conocimiento ordinario, es decir, se ha obtenido mediante el método de la ciencia y puede volver a someterse a prueba, enriquecerse y, llegado el caso, superarse mediante el mismo método. A medida que progresa, la investigación corrige o hasta rechaza porciones del acervo del

conocimiento ordinario. De tal forma que será necesario que la investigación científica se rija a través de reglas para poder operar dentro de la investigación. El enfoque científico está constituido, por el método científico y por el objetivo de la ciencia.

El proceso de la investigación científica se retroalimenta constantemente, el planteamiento del problema y la hipótesis se contrastan y se evidencian con la información recopilada en la investigación, con el único propósito de generar un nuevo conocimiento; este proceso se aprecia gráficamente en la Figura No. 1 denominado ciclo de investigación.

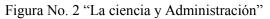
Figura No. 1 Un ciclo de investigación

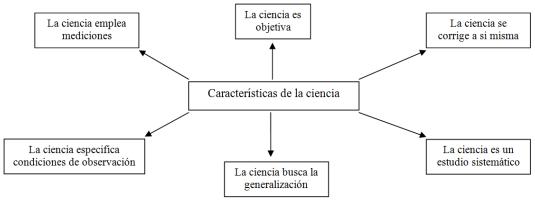


Fuente: Bunge (2002) "La investigación científica, su estrategia y su filosofía"

Cuando se afirma alguna situación que no tiene apoyo cuantitativo y metodológico, se dice que la ciencia es subjetiva, en vista de que interviene el gusto, sentimiento y educación de quien efectuó esa afirmación. Pero el Método buscara corregirse a sí mismo, realizara un estudio sistemático para indagar la generalización y la delimitación especifica de las condiciones observables, estas características nos conducen a la ciencia objetiva, donde se emplean las mediciones como una herramienta cuantitativa. La administración por ser una ciencia o disciplina del área social deberá aplicar el método científico para la generación de un nuevo conocimiento, es decir, la objetividad que otorga el método a las opiniones vertidas en relación a una investigación se aplicara a las diferentes disciplinas del conocimiento.

En la polémica conceptual para definir a la Administración como una ciencia; Namakforoosh en su obra refiere a Enrique Gutiérrez López, quien plasma en su manuscrito denominado "La Ciencia y Administración" de su curso de Metodología Avanzada de Investigación del programa de Doctorado, F.C.Y.A.U.N.A.M. 1983, las características que delimitan el concepto de una ciencia mostrado en la Figura No. 2.





Fuente: Namakforoosh (2010) "Metodología de la Investigación"

Una vez contextualizada la Administración como una ciencia podemos aplicar los procedimientos de medición, los cuales se consideran como una guía o norma que se usa como referente para medir algo (Rivas, 2006); la medición debe ser considerada a través de reglas, clases de medición, como clases de propiedades y técnicas de medición (Bunge 2002). Según Rusell (1938) define a la medición de magnitudes como "cualquier método por medio del cual se establece una correspondencia única y reciproca entre todas o algunas de las magnitudes de un tipo y todos o algunos de los números integrales, racionales y reales". La asignación de números debe tener relación lógica matemática con los objetos de estudio que se pretendan probar. Los eventos en la vida cotidiana que son observables deben identificarse a través de esta relación lógica matemática y así lograr relacionar las situaciones para que sean sometidas a pruebas de medición.

Ahora bien ¿Por qué se debe medir en la investigación?. La medición es parte de nuestras vidas, según refiere Hernández et al. Se debe prestar especial atención a todo lo que nos rodea, a través de las situaciones en la vida cotidiana y sin planearlo utilizamos la medición. Bunge, (2002) Aclara los conceptos que integran la medición en base a la definición de la misma: "La explicación más corriente de la medición, al tomar como centro la construcción de escalas de medición. Por el contrario, la medición propiamente dicha es un eslabón de una cadena mas bien larga de operaciones conceptuales y empíricas", en este contexto se explica la cadena de medición en la Tabla No. 2 denominada Cadena de Medición de Bunge.

Tabla No.2 Cadena de Medición de Bunge

ESLABÓN	DEFINICIÓN
Concepción	Clara del mensurandum y del objetivo de la medición con la ayuda de una teoría
Objetificación	Del mensurandum por medio de enunciados de leyes
Concepción	Una escala de medición ideal (con un cero y una unidad si es métrica)
Realización	De una escala material que refleje la escala conceptual
Proyección	Del equipo, basada en teoría relevantes
Construcción	Del equipo (frecuentemente con la ayuda de la tecnología, basada en fragmentos de ciencia pura)

Fuente: Mario Bunge (2002) "La investigación científica, su estrategia y su filosofia"

En conclusión se podría definir a la medición como "La *Normalización* de las lecturas con la ayuda de la teoría basado en una Sistematización de datos para la *Búsqueda* de errores sistemáticos con el apoyo del *Cómputo* de los valores "exactos" (medio) y de esta manera calcular el error estándar.

# CARACTERÍSTICAS DE LA MEDICIÓN

Dentro de las características de la medición se encuentran las operaciones matemáticas y estadísticas que se utilizan en las escalas de medición; Namakforoosh (2010), define una escala como un instrumento de medición; un velocímetro es una escala así como lo es también una regla. En el mismo sentido Rivas (2006), refiere a Coleman (1973) definiendo escala como cualquier serie de ítems arreglado de un modo progresivo de acuerdo al valor o magnitud que toman para su cuantificación.

Para manejar la escala de medición debemos estar sujetos a ciertos criterios para su construcción, en tal efecto Heinemann (2003), describe cuales son esos criterios en la construcción de escalas; como primer criterio, menciona que todos los valores de una variable han de estar situados lógicamente al mismo nivel, segundo criterio, los valores de una variable han de excluirse recíprocamente, tercer criterio, los valores de una variable han de excluirse recíprocamente, tercer criterio, los valores de una variable han de ser inequívocos; es decir, todos (personas, encuestas, entrevistador, observador, codificador) tienen que clasificar los mismos hechos de la misma manera, cuarto y último criterio, los valores de una variable han de ser posible y completos. A continuación se presenta la Tabla No. 3 que identifican y definen según varios autores los conceptos de cada escala:

Tabla No. 3 Definiciones de Escalas de Medición

		NAMAKFOROOSH,	Es una escala que implica un nivel mínimo de medición, porque los datos que contiene son solamente
		2010.	números de ocurrencia en cada clase o en cada categoría de la variable, por lo tanto los números asociados
$\mathbf{S}$	A L		a los objetos no tienen significancia
<b>V</b>	ESCALA NOMINAI	Rivas, 2006	Es una escala utiliza números o letras, se asigna a los sujetos de investigación, son etiquetas que permiten
Ĕ	ΣF	10100,2000	clasificarlos. Es la más simple de las escalas. Identifica sujetos de investigación mediante el nombre.
Ě	S	Heinemann, 2003.	Este tipo de escala tan solo determinan si los hechos existen o no.
Ē,	- z	Giroux & Remblay,	Escala de medición que permite distinguir las diversas formas de una variable asignándoles una etiqueta
4		2004.	(un nombre) arbitraria.
ESCALAS PARAMÉTRICAS			
ΡA		Namakforoosh, 2010.	Tienen las características de la escala nominal además de un indicador de orden. En este nivel de medición
$\mathbf{s}$			no solo se clasifica sino también se exhibe una forma de relación.
Γ	AI A	Rivas, 2006	La escala ordinal implica un orden jerárquico entre los valores del ítem descrito. Es decir, aquí si existe
[Y]	ESCALA		diferencia entre la magnitud e importancia de los valores que se asignan.
S	S S	Heinemann, 2003.	Las escalas ordinales sitúan los valores en una gradación, determinan las diferencias adoptando la forma
E	ΞC		"mayor"-"menor" o "con frecuencia"-"raras veces"-"nunca".
		Giroux & Remblay,	Escala de medición que permite distinguir entre las diversas formas de una variable, ordenándolas de una
		2004.	manera no arbitraria.
		Namakforoosh, 2010.	Estas tienen las características de la escala nominal y ordinal, y además incorporan el concepto de
			igualdad de intervalo. Con este tipo de escala se puede medir la diferencia, esta se caracteriza como una
	R		unidad de medición común y constante que asigna números reales a todos los pares de objetos en una serie
A.	ESCALA INTERVALAR		ordenada.
P	ESCALA FERVAL	Rivas, 2006	Escala mas precisa que las anteriores, y da detalles no solo del orden, sino de la distancia entre cada valor.
Ĕ	చ జ్		Es una escala que distingue los objetos de acuerdo a las magnitudes en unidades de intervalos iguales.
E,	ES E	Heinemann, 2003.	Establecen ya de antemano grandes intervalos entre los valores. Los intervalos son del mismo tamaño. Sin
N N	7 E	Hememann, 2005.	embargo no aparece fijado un punto cero.
R	-	Giroux & Remblay,	No define.
PA		2004.	No define.
0			Estas asselas incluyan todas las aspectarísticas antarianas mas el comonte de como absolute y arizon e
ž		Namakforoosh, 2010.	Estas escalas incluyen todas las características anteriores, mas el concepto de cero absoluto u origen a
S	E		propiedades tales como las dimensiones físicas: peso, estatura y distancia, que tienen cero natural y que
T			son medibles con escalas naturales.
CA	S L	Rivas, 2006	Es una escala que permite medir, en términos absolutos, donde el cero si es considerado y representa la
ESCALAS NO PARAMÉTRICAS	CALA D RAZON		ausencia de un atributo.
-	ESCALA DE RAZON	Heinemann, 2003.	Define a este tipo de escala como cociente o proporción como una escala fraccionada con un punto cero.
	H	Giroux & Remblay,	Define a este tipo de escala como escala de proporciones como escala de medición cuantitativa que
		2004.	atribuyen un valor numérico (incluido el cero absoluto) no arbitrario a las diversas formas de una variable.

Fuente: Creación Propia.

La Tabla anterior identifica las escalas de medición Paramétricas y No Paramétricas, donde las primeras se integran de escalas de Intervalo y Razón, mientras que las segundas se refieren a las escalas nominales y ordinales, las Paramétricas siguen patrones de estadistica riguroza y las No Paramétricas siguen un orden detallado. Las operaciones matemáticas realizadas a las pruebas de medición, permiten determinar una validez, confiabilidad y practicabilidad de la medición.

Lo anterior descrito nos conlleva a determinar las diferencias de las escalas:

- a) Si tienen un punto cero,
- b) Si los valores que se comprueban poseen gradaciones,
- c) Si se han establecido intervalos entre los valores

Tabla 4. Diferencias entre escalas de Medición

ESCALA		PUNTO CERO	INTERVALO	GRADACIÓN	EJEMPLOS.
Nominal		NO	NO	NO	Tipo de deporte, sexo.
Ordinal		NO	NO	SI	Intensidad de sentimientos, estratificación.
Intervalo		NO	SI	SI	Temperatura en grados, coeficiente de inteligencia.
Cociente Proporción	0	SI	SI	SI	Ingresos, tiempos, fuerza.

Fuente: Klaus Heinemann (2003)

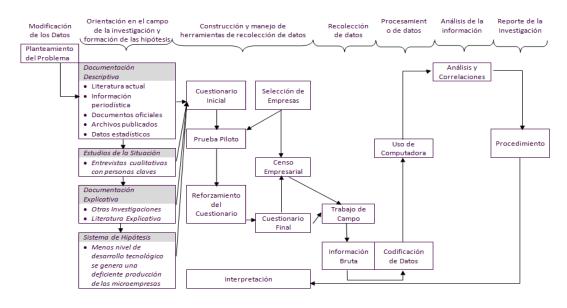
Una vez identificados los niveles y características de la medición, se podrá realizar a detalle el instrumento mas acorde al tipo de investigación, para ello, se debe introducir a la búsqueda de los tipos de instrumentos, ya sea utilizando alguno ya creado o bien se decida a construir un instrumento propio.

#### **INSTRUMENTO DE MEDICIÓN**

Michel Séruzier (2007) menciona que "El instrumento de medición se elabora conforme a la teoría científica que interpreta el fenómeno. Es decir, la determinación del instrumento está profundamente vinculada a la comprensión del mismo fenómeno que se pretende medir. Los instrumentos de medición deben indicar correctamente lo que se desea medir, de manera comprensible y logrando el entendimiento de los creadores, ejecutores y destinatarios del mismo, la psicología menciona que el proceso de evaluación de un instrumento de medición debe considerar tres características principales; la Validez, la Confiabilidad y la Factibilidad; la Validez se refiere al grado en que la prueba mide la realidad de lo que se desea medir, la Confiabilidad nos habla de la exactitud o precisión de los procedimientos de medición y la Factibilidad indica cuales son los factores que determinan la posibilidad de realización, tales como: factores económicos, conveniencias y el grado de interpretación del instrumento de medición.

Los proyectos de investigación abarcan desde la estructura teórica del proceso de investigación, hasta el diseño de las etapas que se pretenden medir en el estudio. En este contexto se inserta la matriz de congruencia. Herramienta que brinda la oportunidad de resumir el tiempo dedicado a la investigación, su utilidad permite organizar las etapas del proceso de investigación estableciendo congruencia entre cada una de las partes involucradas en dicho procedimiento. Rivas establece qie la matriz metodológica es definida como "el instrumento científico que permite hacer congruente y coherente el proceso de la medición de las variables independientes y dependientes, creando un marco de comparación racional y ordenada para la construcción de un cuestionario".

Existen diferentes formas de diseño de una matriz metodológica, las cuales cuentan con elementos tales como: (1) descripción conceptual de cada variable (2) definición operacional de cada variable, (3) descripción de dimensiones asociadas a cada variable, (4) especificación de los indicadores asociados a cada dimensión, (5) determinación de los ítems o preguntas asociadas a cada indicador, (6) especificar el tipo de escala para cada ítem e (7) indicar la variación de cada escala (Rivas, 2006). En este sentido, debemos considerar la necesidad de aplicar una metodología para la construcción de la Matriz de Congruencia, ver Figura No. 3 "Diagrama de la Metodología Utilizada en la Construcción de la Matriz de Congruencia"



#### Figura No. 3 "Diagrama Construcción de la Matriz de Congruencia"

Fuente: Oscar Hugo Pedraza Rendón, Vasco de Quiroga, de la UMSNH

Finalmente, el análisis del ejemplo presentado permitirá adaptar la matriz a su investigación particular y comprobar su eficacia para avanzar en sus trabajos de investigación. Un ejemplo de matriz de congruencia, se presentara a continuación en la Tabla No. 4

Tabla No. 4 "Variable Servicio Civil de Carrera"

VARIABLE	DIMENSIÓN	DEFINI		INDICADOR	ITEM	AMPLITUD	ESCALA
		CONCEPTUAL	OPERACIONAL			ÍNDICE	Locator
Dependiente e Independiente	1.Objetivo del Servicio Profesional de Carrera	La finalidad del Servicio Civil de Carrens será contribuir a la mejoría en la calidad de los servicios gubernamentales, mediante una eficiente selección, contentización, capacitación, desarrollo, promoción, permanencia productiva y retiro digno de Carrera ( <u>Hato</u> 2000).	permanente e imparcial de evaluación y capacitación que regule el ingreso y promoción de los cuadros de la Administración Pública con base a criterios verificables de equidad, transparencia y permanencia, acorde a	<ul> <li>Grado y cobertura del conccimiento del Objetivo.</li> <li>Grado de Comprensión.</li> </ul>	El cuestionario se aplicará por dependencia y se iniciará asentando el objetivo del servicio profesional de carrera de cada dependencia. CUESTIONARIO 1Conocía el objetivo con antelación. 2El objetivo es claro: <i>ENTREVISTA A EXPERTOS</i> 1. dEl objetivo del SPC es lo suficientemente claro para la comprensión de los funcionarios públicos en general?	Si No 1. Acuerdo total. 2. Acuerdo 3. Parcialmente 4. Desacuerdo 5. Desacuerdo Total	5 1 5 4 3 2 1
				<ul> <li>Percepción del cumplimiento.</li> <li>Mejores prácticas.</li> </ul>	CUESTIONARIO 3.El objetivo se cumple ENTREVISTA A EXPERTOS 2. ¿Considera usted que el objetivo del SPC se cumple en las dependencias que lo operan? 3. En su opinión cuál sería la dependencia que mejor cumple con los objetivos del SPC?	1. Acuerdo total. 2. Acuerdo 3. Parcialmente 4. Desacuerdo 5. Desacuerdo Total	5 4 3 2 1 No aplica

Fuente: Rivas 2006, "Como hacer una tesis de Maestría"

Como se aprecia en cuadro anterior, es indispensable identificar las variables para operar las dimensiones y a su vez definirlas conceptualmente así como operacionalmente mediante la literatura, debido a que estas llevan a formar los indicadores que serán objeto especifico para elaborar nuestro ítem (cuestionario), mismo que se identifica con el índice de amplitud para establecer la escala de medición.

Las variables según Levine (2006), son las características de los objetos o de los individuos. Todas las variables deben de tener una definición operacional, es decir, un significado universalmente aceptado que sea claro para todos aquellos que estén relacionados con el análisis; Estas variables se pueden dividir en variable dependiente e independientes: Una *variable dependiente* es aquella cuyos valores dependen de los que tome otra variable independiente; Una *variable independiente* es aquélla que es manipulada por el investigador en un experimento con el objeto de estudiar cómo incide sobre la expresión de la variable dependiente.

Toro y Parra (2006), establecen que las variables están compuestas por *dimensiones*. Las dimensiones a su vez se dividen en *indicadores*. Las variables en su definición normal y operacional tendrán características y comportamientos según el problema tratado y el área en la cual participa, por consiguiente la construcción de un instrumento de medición se representa en la Figura No. 4.

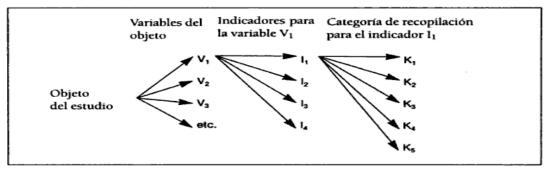


Figura No. 4 Proceso de Interpretación del Desarrollo del Instrumento de Medición

Fuente: Klaus Heinemann (2003)

Una de las herramientas más utilizadas para recopilar datos y realizar pruebas estadísticas lo son la entrevista y la encuesta. Heinemann, (2003) define a la entrevista como "*El instrumento que consiste en conseguir, mediante preguntas formuladas en el contexto de la investigación o mediante otro tipo de estímulos, por ejemplo visuales, que las personas objeto de estudio emitan informaciones que sean útiles para resolver la pregunta central de la investigación. Pueden definirse la entrevista como un test de estimulo-reacción.*" En este contexto se puede decir que este instrumento de medición cuenta con ventajas significativas en comparación de otros instrumentos.

Los datos obtenidos a través de la entrevista y/o cuestionario deben ser sometidos al proceso de la interpretación mediante las pruebas estadísticas. Los autores Levine, Krehbiel, Berenson (2006) definen, para este proceso a la estadística como: "La rama de las matemáticas que examina las formas de procesar y analizar datos. La estadística ofrece los procedimientos para recolectar y transformar los datos de manera que sean útiles a quienes toman decisiones en los negocios", por su parte Robert R. Pagano (2007) indica que las estadísticas son "El número calculado a partir de los datos de la muestra. Así, el promedio de un conjunto de datos obtenidos a partir de la muestra seria una estadística". Lo que significa que las estadísticas buscan medir las características de una población especifica en una situación concreta.

# PRUEBAS ESTADÍSTICAS SEGÚN EL TIPO DE ESTADÍSTICA

La aplicación de la estadística puede darse en varios niveles, la división de la estadística se encuentra entre la estadística descriptiva y la inferencial, Alvarado, Obagi (2008), definen a la estadística descriptiva como "El conjunto de técnicas para analizar, describir e interpretar los datos recolectados sobre un fenómeno de interés, con el fin de tomar decisiones, obtener conclusiones o plantear hipótesis".

Por otro lado la estadística inferencial es definida por Tomás-Sábado (2010) como "*El análisis que se apoya en el cálculo de la probabilidad, que a partir de los datos obtenidos de una muestra, trata de sacar conclusiones acerca de las características de una población*". En la Tabla No. 5 se identifican las divisiones que contiene la ciencia estadística:

Tabla No. 5 Divisiones de la Estadística

PRIMERA DIVISION DE LA ESTADISTICA	DESCRIPTIVA	Describe en frma literal, numérica y gráficamente los fenómenos colectivos.
SEGUNDA DIVISION DE LA ESTADISTICA	INFERENCIA ESTADISTICA ESTADISTICA PURA ESTADISTICA APLICADA	Infiere y obtiene resultados de la Estadística Descriptiva para analizarlos e interpretarlos Estudia los métodos, técnicas, procedimientos, principios, teorías, leyes, sin pensar en su probable aplicación Estudia los mismos aspectos, pero en función de su aplicación a otras disciplinas científicas.
Evente Conte Duinte Contenden		

Fuente: Sexto Prieto Contador

En el proceso de medición para la investigación científica, el investigador debe tener en claro las divisiones de la estadística, porque este dará una consistencia a la necesidad de su investigación, es decir, es indispensable conocer que la herramienta de la estadística descriptiva tiene, según sus variable no paramétricas señaladas en la literatura, los niveles, métodos y técnicas que se utilizan en esta área. Conocer las pruebas estadísticas a nivel descriptivo ayuda, por consiguiente a la señalización precisa de la variable utilizada en cuanto a identificar la escala de la variable o asociación de la misma, para ello, se muestra a continuación en la Tabla No. 6 un panorama de los métodos o técnicas estadísticas en materia descriptiva.

Tabla No. 6 Pruebas Estadísticas descriptivas mas frecuentes de acuerdo a la escala de medición de la variable en estudio.

TIPO DE DESCRIPCIÓN		ESCALA DE LA VARIABLE O ASOCIACIÓN	MÉTODO O TÉCNICA ESTADÍSTICA
Variables Individuales		Categóricas (nominal y ordinal)	<ul> <li>Frecuencias, proporciones o porcentajes representados por gráficos de barras, pastel o pictogramas.</li> </ul>
Variables individuales		Numéricas (intervalo y razón)	<ul> <li>Distribución de frecuencias en clases.</li> <li>Frecuencias acumuladas</li> <li>Percentiles</li> <li>Medidas de tendencia central, dispersión, curtosis y oblicuidad</li> </ul>
Asociación variables	entre	Categóricas con categóricas	<ul> <li>Tabla de contingencias</li> <li>Gráficos de barras</li> <li>Pruebas de Kendall, de Kramer, de Spearman</li> </ul>
Asociación variables	entre	Categóricas con numérica	<ul> <li>Tablas con clasificación categórica, con promedios y desviaciones o error estándar en cada entrada</li> </ul>
Asociación variables	entre	Numérica con numérica	<ul> <li>Gráfico de puntos</li> <li>Coeficiente de Correlación</li> <li>Recta de regresión</li> </ul>

Fuente: Ing. Byron Humberto González (2004), http://www.byrong.tk byrong@softhome.net

Así mismo se debe hermanar para el proceso de medición las pruebas estadísticas utilizadas en materia inferencial, ubicando nuevamente el tipo de variable paramétrica en una escala o asociación en donde es medida, conocer las pruebas, métodos o técnicas ayuda al investigador a precisar aunque con un margen de error sus resultados en la investigación, por consiguiente se muestra en el cuadro No. 7 según el tipo de variable, escala de asociación las pruebas estadísticas que se deben calcular.

Tabla No. 7 Pruebas Estadísticas inferenciales mas frecuentes de acuerdo a la escala de medición de la variable en estudio.

TIPO DE DESCRIPCIÓN	ESCALA DE LA VARIABLE O ASOCIACIÓN	MÉTODO O TÉCNICA ESTADÍSTICA
Variables Individuales	Nominales	<ul> <li>Prueba Z para una proporción poblacional</li> <li>Prueba X<sup>2</sup> para varias proporciones en una sola población</li> <li>Intervalos de confianza para proporciones</li> </ul>
Variables individuales	Ordinales	<ul> <li>Prueba del signo o binomial para la mediana poblacional</li> <li>intervalos de confianza para proporciones</li> </ul>
Asociación entre variables	Muestras grandes con distribución normal	<ul> <li>Prueba de "t" para un promedio poblacional</li> <li>Intervalo de confianza para el promedio</li> </ul>
Asociación entre variables	Muestras pequeñas sin distribución normal	<ul> <li>Prueba del signo o binomial ara la mediana poblacional</li> <li>Intervalo de confianza para el promedio</li> </ul>

#### Fuente: Ing. Byron Humberto González (2004), http://www.byrong.tk byrong@softhome.net

La claridad en el proceso de investigación ayuda al investigador a identificar rápidamente los métodos que debe utilizar para manejar la información recopilada a través de sus instrumentos de medición, cada prueba estadística debe ser ampliada tanto el investigador considere necesario para mostrar sus conclusiones en la investigación.

#### CONCLUSIONES

Las técnicas de investigaciones científicas son variadas y tienen distintos propósitos, todas resultan inútiles si no se comprende la metodología para desarrollarla. El marco teórico permita identificar y establecer las variables así como la determinación de la relación entre dos o más variables. Para lograr el éxito de una investigación es necesario que además de la identificación de variables, la correcta formulación de la hipótesis, la estrategia para probar dichas hipótesis, se requiere que los instrumentos con los que se van a medir dichas variables sean adecuados y permitan obtener información de calidad cuando se apliquen. De ahí la importancia de elaborar un buen instrumento de medición que reuna ciertas cualidades como: validez, confiabilidad, objetividad, amplitud, practicabilidad y adecuación. Si el instrumento que se aplica para recolectar los datos reúne estas cualidades se considera que es confiabil, por lo tanto el investigador podrá aproximarse, al valor real de las variables y reducir el margen de error. Sera necesario conocer las características de las variables de investigación para establecer el nivel de medición que se utilizará para la recolección de los datos, el cual puede ser: nominal, ordinal, de intervalo y de razón, (Giroux et al, 2004).

Las asociaciones de las variables dependientes e independientes son determinantes para medir las actividades de la investigación; éstas identifican el proceso medición, infieren las causas y efectos para llegar a la generalización de forma objetiva a las inferencias que de ellas se realicen. El éxito en el desarrollo de una investigación depende en gran medida, de la calidad de los instrumentos con los se medirán las variables de la investigación. Identificar el instrumento que es utilizado en la recopilación de los datos lleva un proceso minucioso, debido a que, depende de la identificación de las variables, las cuales a su vez darán la ampliación hacia las dimensiones que serán sujetas en la investigación; estas son conceptualizadas operacionalmente para detectar el indicador lo suficientemente concreto en su definición, y este a su vez lleve de la mano el crear los tipos de preguntas que son utilizadas para la recopilación de información dirigido hacia los sujetos de estudio, expresando así la amplitud jerárquica y la escala; por lo tanto se puede afirmar que este es un proceso destacablemente delicado en cuestión del procesamiento que se le de a los datos obtenidos. Es decir, un trabajo de campo riguroso en la investigación cuantitativa.

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# AULA DE MEDIOS CON APOYO DE LAS TECNOLOGÍAS DE LA INFORMACIÓN Y COMUNICACIÓN

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#### RESUMEN

El presente proyecto de mejora dentro de la Facultad de Derecho Mexicali se desarrollará con el apoyo de las tecnologías de la información y comunicación (TIC) logrando la implementación y equipamiento de una aula interactiva de medios la cual servirá como material de apoyo a los docentes y alumnos donde el pizarrón electrónico tendrá el objetivo primordial de involucrarlos con las nuevas tecnologías y a la vez sirva de ayuda para su desempeño académico. El pizarrón electrónico servirá para elaborar materiales didácticos, exponer temas de clase, fomentar la comunicación entre los alumnos y profesores; ayudando a realizar presentaciones académicas. Se capacitará a docentes y alumnos con la finalidad de concientizar el uso y manejo adecuado de este tipo de herramientas tecnológicas para obtener mayores resultados académicos y aprovechamiento de los recursos materiales que proporciona la institución educativa. Las tecnologías de información nos brindan grandes beneficios y un mejor desenvolvimiento dentro de las aulas; estas se vuelven más interactivas tanto para el docente como para el alumno aumentando las oportunidades de participación y discusión.

# MEDIA ROOM WITH SUPPORT OF INFORMATION TECHNOLOGY AND COMMUNICATION

#### ABSTRACT

This improvement project in Mexicali Law School will be developed with the support of information technology and communication (ICT) equipment and managing the implementation of an interactive classroom media which serve as support material for teachers and whiteboard where students will engage the primary objective of the new technologies and also serves as a support for their academic performance. The electronic whiteboard will help develop training materials, exposing class issues, foster communication between students and teachers, helping academic presentations. It will train teachers and students in order to raise awareness on proper use and handling of such technological tools for higher academic results and use of material resources the school provides. Information technologies provide us with great benefits and a better development in the classroom, they become more interactive for both the teacher and the students enhancing opportunities for participation and discussion

# PROPUESTA DE HERRAMIENTAS ALTERNATIVAS UTILEZ EN LA PLANEACIÓN ESTRATEGICA: ESTUDIO DE CASO NEGOCIO DE SERVICIOS Y SU UBICACION

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#### ABSTRACT

# ALTERNATIVE TOOLS PROPOSED IN STRATEGIC PLANNING: BUSINESS LOCATION CASE STUDY

This research focused on measuring perceived characteristics needed by experts, in the context of locational methods used by companies before they started operation, using new approaches in strategic planning management: fuzzy logic. Several detailed procedures have been depicted to operate with fuzzy techniques, which may be applied to empirical research by a wide range of researchers in this field. This empirical study showed that fuzzy logic is an attractive method to increase the value of the information collected from experts' evaluations in locational field, by improving the final decision. The implemented procedure overcomes the disadvantages of the research focused on the third-person approach, and minimizes the categorization and interaction bias derived from the relationship between verbal and numerical labels. Results illustrate the advantages of this method as a tool to improve strategic planning management through this important task " companies location".

JEL: M10, C02

KEYWORD: Fuzzy Logic, Localization models, Administrative Strategic Planning,

# INTRODUCCIÓN

Las organizaciones actuales se enfrentan continuamente a cambios en el entorno, el cual se vuelve cada vez más competitivo, donde la globalización ha pasado de ser un concepto a ser una realidad (Chingping & Montri, 2005). Es ahora común ver a empresas internacionales por competir por un mercado globalizado. Esto provoca que la planeación estratégica ocupe una un lugar cada vez más importante para las empresas. Dentro de las dediciones estratégicas a las que se enfrentan las organizaciones, están aquellas relacionadas con la localización de instalaciones (Gonzalez S., Flores R., & Flores R., 2000). Este aspecto resulta fundamental ya que implica inversiones de largo plazo, impacta en numerosas operaciones e involucra además otras decisiones logísticas. Al considerar está planeación se hace evidente que no solo se deben considerar las condiciones actuales, sino que también se deben tomar en cuenta los posibles cambios en el entorno. Para determinar la ubicación de una empresa existen varios métodos locacionales que implican la utilización de técnicas sencillas hasta modelos complejos.

El modelo locacional que se propone dentro de este trabajo pretende aplicar lógica difusa a las evaluaciones emitidas por los expertos respecto a los factores básicos locacionales que tiene cada ubicación disponible para ubicar el negocio, esto con la finalidad de obtener datos precisos para la ubicación final. Una vez que se tienen las ponderaciones normalizadas estas servirán para aplicarla al modelo de centro de gravedad y así proponer la ubicación que sea la más óptima para establecer

físicamente el negocio, para este trabajo se utilizó un negocio de comida. La finalidad es proporcionar un modelo práctico.

El artículo se divide de la siguiente forma, en la sección uno se hace una introducción al trabajo empírico, en la sección dos se discuten los fundamentos teóricos y metodológicos del trabajo, la sección tres presenta el caso empírico, la sección cuatro se analizan los resultados la sección y por último en la sección cinco muestra las conclusiones.

#### FUNDAMENTOS TEORICOS Y METODOLOGICOS

La decisión de localización a menudo depende del tipo de negocio. En las decisiones de localización industrial, la estrategia usual es minimizas los costos, mientras que en las organizaciones de venta al menudeo o servicios profesionales, la estrategia se enfoca en maximizar el ingreso (Heizer & Render, 2004). El objetivo de la estrategia de localización es maximizar el beneficio de la ubicación para la empresa.

Los elementos teóricos y particulares que servirán de guía durante el proceso de investigación serán los siguientes:

#### Métodos de Localización

Típicamente las decisiones que implican una planeación estratégica a largo plazo incluyen la ubicación de instalaciones. Para que estas estrategias sean exitosas es necesario considerar no solo las condiciones actuales, sino además posibles cambios futuros, tal como acciones tomadas por los competidores para mejorar su posición competitiva (Ghosh & Craig, 1983). Se debe notar también que las decisiones de localización muchas veces implican inversiones considerables para las empresas, además de que comprometen la viabilidad de las operaciones en ciertas áreas geográficas. Usualmente los tomadores de decisión se basan en reportes de mercadotecnia, en análisis demográficos o en otros instrumentos similares para la elección de los sitios adecuados para las nuevas instalaciones. Estos instrumentos frecuentemente reflejan un estado pasado de la situación, por lo que muchas veces no representan la realidad de manera precisa. Los factores que se consideran en estas herramientas son tan variados como: tamaño, imagen, nivel de servicio, presencia de la compañía, distancia hacia puntos de demanda, flujos vehiculares, etc. Todos estos factores implican una gran cantidad de información para el tomador de decisión configuración al sistema completo de la cadena de suministros (Ballou, 2004).

a. Métodos de Selección primaria

Son métodos primarios, que se caracterizan por ser subjetivos y de rápida discriminación, generalmente están basados en la experiencia de quien los utiliza, son sencillos y de fácil aplicación. Los más comunes son los siguientes (Pedraza, 1996)):

b. Métodos de Selección secundaria

Son técnicas que requieren análisis más profundos y que generalmente utilizan a los métodos de selección primarios como insumo para sus aplicaciones, en este apartado se presentan los métodos factibles de utilizar en la realidad.

b.1Método del Centro de Gravead

Este método se usa frecuentemente para analizar el costo de transporte como factor de localización. Se utiliza para la localización de plantas industriales o almacenes de distribución, respecto a puntos de origen, de los cuales reciben productos o materiales, y estos a su vez los envían a otras ubicaciones de destino. Con este enfoque el problema a solucionar es entonces encontrar una localización central que

$$CTT = \sum CiViDi \tag{1}$$

Donde:

Ci = Es el costo unitarios de transporte que corresponde al punto i

Vi= Es el volumen o peso de los materiales transportados desde o hacia i

Di= Es la distancia entre el punto i y el lugar donde se encuentra la planta

El cálculo del costo total de transporte requiere de la estimación de las cantidades a transportar entre cada punto y la instalación en un periodo determinado. El producto CiVi es el peso o importancia que cada punto i, tienen en el sitio a considerar.

Se ubican sobre el mapa o plano los puntos de interés y se determina el centro de gravedad con las siguientes expresiones:

$$X^{*} = \frac{\sum_{i=1}^{n} CiViXi}{\sum_{i=1}^{n} CiVi} \qquad Y^{*} = \frac{\sum_{i=1}^{n} CiViYi}{\sum_{i=1}^{n} CiVi}$$
(2)

Fundamentos de Lógica Difusa (Zadeh, 1978)

La lógica difusa permite representar de forma matemática conceptos o conjuntos imprecisos, tales como días fríos, meses calurosos, personas altas, salarios, alimentos con mucho condimento, valoraciones de negocios, etc. Posteriormente a ellos, otros grandes pensadores como David Hume o Kant apoyaban esta idea manteniendo que el razonamiento venía dado por las observaciones de las que somos testigos a lo largo de nuestra vida y la detección de algunos principios contradictorios en la lógica clásica. Tras la publicación de Lotfi A. Zadeh (L, 1965), se comenzó rápidamente a usar la lógica difusa en distintas aplicaciones prácticas, llegando a su máximo auge a principios de los años 90, y continuando éste hasta la época actual.

Elementos básicos

La lógica borrosa es un tipo de lógica que reconoce más que simples valores verdaderos o falsos. Con lógica borrosa, las proposiciones pueden ser representadas con grados de veracidad o falsedad. Por ejemplo, la sentencia "hoy es un día soleado" puede ser 100% verdad si el sol está en su esplendor, 80% de verdad si hay algunas pocas nubes, 50% de verdad si esta nublado y 0% si el cielo está totalmente cubierto (Pérez C & Vernon, 2007).

## b.Variables lingüísticas

La Teoría de Conjuntos Difusos puede utilizarse para representar expresiones lingüísticas que se utilizan para describir conjuntos o algoritmos. Los Conjuntos Difusos son capaces de captar por sí mismos la vaguedad lingüística de palabras y frases comúnmente aceptadas, como "gato pardo" o "ligero cambio". La habilidad humana de comunicarse mediante definiciones vagas o inciertas es un atributo importante de la inteligencia.

Una Variable Lingüística es aquella variable cuyos valores son palabras o sentencias que van a enmarcarse en un lenguaje predeterminado. Para estas variables lingüísticas se utilizará un nombre y un valor lingüístico sobre un Universo de Discurso. Además, podrán dar lugar a sentencias generadas por reglas sintácticas, a las que se les podrá dar un significado mediante distintas reglas semánticas.

D. Sistemas controladores fuzzy y Reglas de inferencia

E.

)

Figura no. 1: Procesamiento general de un sistema difuso mediante la Técnica de Mandani

usan como enunciados que unen a las variables lingüísticas con operadores de y / o ver figura 1.

SI proposición fuzzy antecedente ENTONCES proposición fuzzy consecuente



Muchas de esas reglas se basan en (Corporation);

Fuente : FisPro : An open source portable software for fuzzy inference systems fispro (FisPro, 2010)

Un sistema de inferencia difuso contendrá un conjunto de reglas de descripción lingüística (Technology, 2006).En el caso más general los antecedentes y consecuentes de estas reglas incluirán proposiciones difusas compuestas, es decir, combinarán múltiples entradas y salidas. Este tipo de sistema se denomina sistema MISO ("multiple input single output") (Sodiya, Onashoga, & Oladunjoye, 2007).

Y de forma general los enunciados son de la forma SI <u>entrada 1 es X\_1</u> Y <u>entrada 2 es X\_2</u> Y <u>... entrada n es X\_n entonces Y\_r</u>

La *defuzzificación* convierte un valor fuzzy a un valor natural. Este proceso es un tanto complejo ya que un conjunto difuso no se puede traducir directamente a un valor natural. Los sistemas físicos requieren valores discretos y es aquí donde la defuzzificación tiene su importancia.

## CASO EMPÍRICO: PROPUESTA DEL USO DE LÓGICA DIFUSA UTILIZADA COMO HERRAMIENTA DE LOCALIZACIÓN

La localización de un negocio con características específicas puede parecer ser un desafío desalentador para el inversionista principiante o el analista experimentado. Pero, es más eficiente si se sigue un procedimiento lógico, sistemático. Cuando se adopta tal acercamiento, las oportunidades de encontrar una localización que maximice la capacidad del negocio, tanto en costo como rentabilidad, se verán aumentados según los objetivos trazados. En este apartado se presenta el modelo propuesto así como se toca el detalle del desarrollo del mismo.

El modelo propuesto fue dividido en 6 fases con la finalidad de realizar un proceso ordenado, en la fase 1 se Determinación de Factores básicos de localización y Ponderación de los factores básicos de localización, la fase 2 se identifica en el mapa los sitios probables para la ubicación, en la fase 3 se aplica la difusividad a las ponderaciones dadas por los expertos sobre cada factor locacional de cada localidad Fuzzy (Software Matlab 6.5), la fase 5 se aplica un método de localización secundaria (centro de gravedad) por último en la fase 5 y 6 se analizan y evalúan los resultados finales.

El proceso llevado acabo durante la aplicación al caso práctico se puede resumir en la figura 3

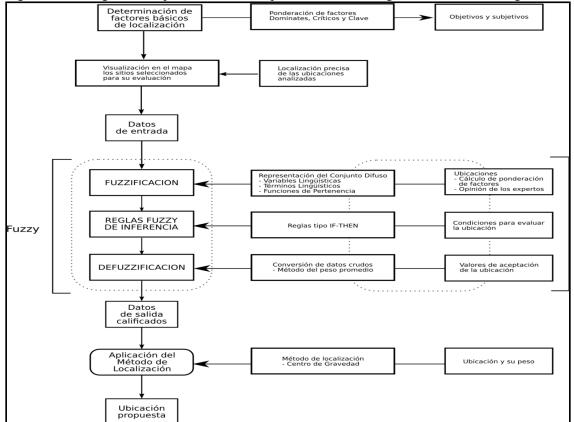


Figura no.3: Diagrama del proceso a realizar para localizar un negocio a través de la lógica difusa.

Fuente: Elaboración Propia

Fase 1. Determinación de los factores de localización a evaluar por parte de los expertos

TT 1 1	<b>T 1 1 T</b>		• •	1	1 • . 1 •	, , , , ,
Tabla no L	. Tabla de Factores	Basicos La	ocacionales	determinados	nara la instalació	n del negocio
1 4014 110.1	. I dola de I deteles	Dusicos L	ocucionales	actorininados	puru iu motuluen	m der negoeio.

	DETALLE DEL FACTOR	CUALIDAD
lo	Zona con promedio de ingresos por casa habitación de ingreso de 10,000 pesos mensuales	Objetiva
	Cercanía a Centros Comerciales y/o Zona Financiera	Objetiva
s de materia Prima	Centros de abastecimientos de calidad y precios competitivos (según mercado)	Subjetivo
le Obra	En un rango de 18 a 40	Objetiva
	Con aspiración a salarios mensuales de 4000 a 12000	Subjetiva
	Terreno deberá contar con los servicios de Agua, Luz y Gas	Objetiva
	FOR LOCACIONAL ELECCIONADO do s de materia Prima de Obra tructura de la localidad luz, energía y gas)	ELECCIONADO do Zona con promedio de ingresos por casa habitación de ingreso de 10,000 pesos mensuales Cercanía a Centros Comerciales y/o Zona Financiera Centros de abastecimientos de calidad y precios competitivos (según mercado) de Obra En un rango de 18 a 40 Con aspiración a salarios mensuales de 4000 a 12000 tructura de la localidad Terreno deberá contar con los

Factores Clave	Accesos y visibilidad	Alta visibilidad y excelente vías de acceso	Subjetiva Objetiva

Fuente; Elaboración propia

Fase 2.Ubicación en el mapa de los terrenos disponibles para aplicarle la valorización de los factores básico locacionales por parte de los expertos.

Fase 3. Aplicación de difusividad a las ponderaciones dadas por los expertos sobre cada factor locacional

de cada localidad Fuzzy (Software Matlab 6.5) para mayor detalle ver anexo 1.

$$z^* = \frac{\sum \mu_c(\bar{z})\bar{z}}{\sum \mu_c(\bar{z})}$$
 Fórmula utilizada para la determinación del peso final por localidad, obteniendo una

valuación final por localidad;

Fuente; Elaboración propia

Tabla no.2. Tabla de Pesos obtenidos por localidad

Localidad A	Localidad B	Localidad C	Localidad D	Localidad E	Localidad F
0.865	0.787	0.5305	0.867	0.7545	0.867

Fase 4. Aplicación del Método de Localización. El modelo a desarrollar es el siguiente:

Término en X:

Término en Y:

$$X = \sum_{n=1}^{i} \frac{CF_i X}{CF_i} \qquad \qquad Y = \sum_{n=1}^{i} \frac{CF_i Y}{CF_i}$$

Los detalles del cálculo se encuentran en el anexo 1.

Fase 5. Análisis de los resultados obtenidos del método de localización se contrastan con la cercania de las ubicaciones disponibles para la obtener la ubicación final

Para evaluar los resultados obtenidos es importante visualizar los parámetros de importancia que debería tener la ubicación ideal

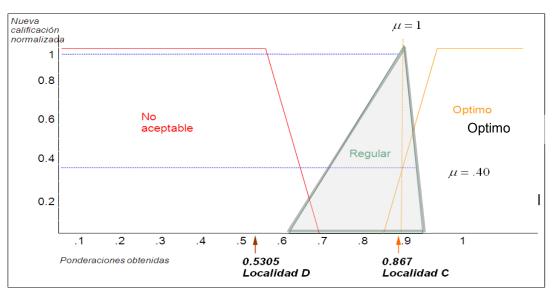
Los parámetros para ideales para ubicar el negocio serán:

Tabla no.3. Parámetros determinados para determinar que ubicación es conveniente

Optimo	Regular	No Aceptable	
85 en adelante	De 70 a 85	Menor a 70	

Fuente; Elaboración propia de acuerdo a opinión de expertos.

Grafica no 1. Determinación del grado de conveniencia de las ubicaciones candidatas respecto a la ubicación obtenida con el método de centro de gravedad.



Fuente: Elaboración propia con base en los resultados Software Matlab 6.5

La ubicación obtenida mediante el Método de Centro de Gravedad queda en un punto en el mapa relativamente cercano a las localidades C y D con ponderaciones de 0.5305 y 0.867. Para lo cual analizaremos la conveniencia de estos sitios de acuerdo con las ponderaciones dadas por los expertos. Resultando en lo siguiente:

Fase 6. Evaluación y Resultados finales

De acuerdo a la gráfica 1 se observa que la localidad C cae en definitiva en el rango de lo no aceptable por lo tanto no se toma en cuenta como sitio potencial para la ubicación de la franquicia, noo así la localidad D. Sé que determinan  $\mu$  para conocer qué proporción guarde este sitio respecto a las características deseadas por los expertos y así conocer si realmente será el lugar óptimo. Y se obtiene lo siguiente:

 $1\mu = .40$  Optimo

## $1\mu = 1$ Regular **DISCUSIÓN DE RESULTADOS**

Se puede observar que este sitio cuenta con un .40 dentro de las características requeridas en el parámetro de lo óptimo y un 1 dentro de los parámetros de lo regular, esto quiere decir que la localidad D es aceptable para considerarse para la ubicación del negocio.

Aun que existieron otras 2 localidades con casi la misma puntuación F y A, con este método se puede apreciar visual y cuantitativamente la ubicación optima del sitio ya que reúne todas las características solicitadas por los expertos para localizar el negocio.

Esto no quiere decir que las otras localidades no sean igual de buenas aun que salieron con ponderaciones igual de altas. Ya en una situación real pudiera afectar la dedición del sitio final, aspectos de tipo económicos, legales (respecto al terreno) etc.

El método cumple con evaluar cada sitio con todas las apreciaciones, requerimientos y conocimientos de los expertos dados a cada ubicación, la dedición final queda en mano del inversionista.

#### CONCLUSIONES

- Existen herramientas matemáticas como la lógica difusa que permite operar datos que se encuentran dentro de la incertidumbre y que dan como resultados valores equilibrados y muy cercanos a la realidad y que, al mismo tiempo, nos ahorran la aplicación de análisis numéricos más complejos. Y que por medió del caso practico analizado se puede concluir que la lógica difusa es una opción para hacer más precisa y enriquecido el proceso de localización de negocios.
- Como se logró comprobar, al tener datos diversos emitidos por los estudios y evaluaciones de los expertos en base a variables localizacionales de las ubicaciones propuestas para la instalación del negocio en muchas de las ocasiones no son coincidentes debido a los métodos y perspectivas del análisis de cada uno de los expertos al analizar las ubicaciones y en consecuencia se tienen factores de variación entre los resultados emitidos. Según nuestro caso práctico la localidad ideal para ubicar el negocio franquiciado sería la C.

Estas técnicas de análisis difuso no sustituyen o desplazan a otras técnicas convencionales, estadísticas o de otro tipo. Las técnicas de análisis difuso complementan y potencializan a las técnicas existentes y pueden aportar nuevas formas de acercarse a la valoración de factores localizacionales o de otro tipo en la planeación estratégica de nuevos negocios.

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# COMPETENCIAS GERENCIALES DE LA INDUSTRIA DE MUEBLES.

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#### RESUMEN

La investigación presenta los resultados de una encuesta aplicada a trece empresas del sector de muebles localizadas en México con el objetivo de identificar las competencias gerenciales de estas empresas. El marco teórico se refiere a la teoría de recursos y capacidades, dicha teoría considera que la competitividad de la empresa se genera al interior de la misma y de esta manera se generan ventajas competitivas sustentables que le permitan afrontar la competencia y participar en el mercado. Parte de estas capacidades se sustentan en la gerencia y en su forma de dirigir la organización y su capacidad estratégica. Se trata de una investigación de tipo descriptivo, puesto que se caracterizan los aspectos más relevantes de los gerentes del sector mueblero de la ciudad de Puebla que les han permitido permanecer en el mercado. Se pretende describir aquellos aspectos distintivos y particulares de los gerentes.

PALABRAS CLAVES: Pyme, competencias gerenciales, competitividad, muebles

## MANAGEMENT SKILLS OF FURNITURE INDUSTRY

### ABSTRACT

This research present the results of twelve manufacturing furniture firms in the city of Puebla, seeking to identify the managerial skills possessed for the conduct of their businesses.

The theoretical framework is based on the theory of resources and capabilities, which, considers that the competitiveness of the company is in within and thus generate sustainable competitive advantages that allow it to cope with increasing competition and impact on the market successfully. Some of these capabilities are based on management and the conduct of the organization and its strategic capacity.

**JEL:** L11, L22, M120

KEY WORDS: Small and medium firms, management skills, competitiveness, furniture

## INTRODUCCIÓN

En el modelo de Ansoff (1995), las competencias de gestión general se describen por cuatro componentes principales: perfil de los directivos, características del clima de la organización, competencia de la organización para resolver problemas y habilidad global de la organización.

El perfil de los directivos se determina, en primer lugar, en medición de las habilidades de liderazgo. Además, su contribución a las competencias de gestión depende de la influencia que pueda ejercer sobre la organización (posición de poder). En segundo lugar, el perfil directivo está integrado por la llamada mentalidad del directivo, constituida por cuatro variables: a) su conocimiento del entorno interno y externo; b) su perspectiva temporal, que revela la confianza relativa en los resultados o en las perspectivas; c) su propensión al riesgo, que mide la percepción de los factores decisivos para el éxito, y d) el sistema de valores, normas y objetivos que motivan y condicionan decisivamente de su aceptación y apoyo o su rechazo a las respuestas estratégicas que diseñe la dirección general de la empresa. Dichas notas, constituyen factores decisivos en la mentalidad o cultura de la organización, y consiguientemente en la aceptación y apoyo o rechazo de la empresa a las respuestas estratégicas diseñadas. El clima de la organización se integra, con otros elementos clave, junto con la cultura organizativa, las recompensas e incentivos para la actividad estratégica, y la estructura de poder de la organización integrada por la distribución interna del poder y el compromiso hacia los respectivos centros de poder.

El tercer componente clave es la competencia de la organización para resolver problemas.

Los factores determinantes de esta competencia son los siguientes:

La estructura de la organización, la red de autoridad y de responsabilidad.

El grado de consistencia entre la estructura organizativa implantada y el nivel de turbulencia del entorno constituye un área crítica para la eficacia directiva.

El diseño organizativo, es decir, un amplio rango de decisiones sobre la definición de puestos de trabajo, los roles individuales e interpersonales, la organización del trabajo, y sus respectivas libertades y restricciones.

Los sistemas y procesos que posibilitan el funcionamiento de la estructura. Una amplia gama de sistemas y procesos de planificación, ejecución, control e información merecen aquí en detallado estudio.

El intercambio de conocimientos sobre el medio ambiente interno y externo.

Las tecnologías de resolución de problemas de dirección general.

Por último, las competencias directivas reciben la influencia de la capacidad global de la organización. En este sentido, la hipótesis de Ansoff (1985) puede enunciarse en los términos siguientes:

[...] las empresas estratégicamente estables operan con más eficacia cuando la habilidad de la dirección general es mínima y la responsabilidad es compartida de forma descentralizada por la dirección media y los supervisores. Pero, cuando se presenta una irregularidad estratégica la dirección general se convierte en el cuello de botella que determina la velocidad de la respuesta (Ansoff, 1985: 34).

El comportamiento futuro de la empresa estará dado, por la combinación de la mentalidad de los directivos y el clima de la organización, que son los elementos software de las competencias directivas. Los subconjuntos de hardware, que deciden la habilidad de la organización para actuar eficazmente, están formados por la calidad de los directivos (talento, conocimientos, cualidades), junto con la competencia y las habilidades propias de la organización.

La frecuencia y velocidad de las irregularidades del entorno y, necesariamente, del comportamiento estratégico de la empresa, obligaran a su dirección a centrar los esfuerzos tanto en el diseño de las nuevas estrategias como en el desarrollo de las competencias de gestión que requieran.

Estudios empíricos muestran que hay diferencias entre los directivos de las décadas de los ochenta y noventa, estas se muestran principalmente en la actitud hacia el liderazgo; los primeros mas autoritarios y basados en el poder del cargo, eran poco propensos al liderazgo participativo y trabajo en equipo y flexibilidad, en cuanto a aceptar sugerencias y reconocer capacidades en sus subordinados. Agregando a esto, el reconocimiento de la cultura como elemento diferenciador de la competitividad.

#### Modelo gerencial para la gestión de competencias

Las empresas han desarrollado algunas características que deben cumplir los equipos gerenciales para una buena gestión por competencias; en esencia se están exigiendo capacidades de:

a. Expansión de la estrategia del negocio: orientación al negocio, logro y autoconfianza.

- b. Servicio con valor agregado: orientación al cliente y conciencia de costos.
- c. Gestión del talento: desarrollo de personas, dirección de otros con enfoque participativo y liderazgo.
- d. Gestión estratégica: visión, innovación, administración de proyectos y gestión del cambio.
- e. Fundamentación: flexibilidad, aprendizaje organizacional, trabajo en equipo, pensamiento complejo y creatividad.

#### Competencias gerenciales

1. Competencia en la comunicación. Capacidad de transmitir e intercambiar eficazmente información para entenderse con los demás. Comunicación informal. Promueve una comunicación en dos sentidos: retroalimentar, escuchar e interactuar. Está al tanto de lo que siente el otro. Relaciones interpersonales consistentes con la gente.

Comunicación formal. Informa a las personas sobre los hechos y actividades, los mantiene al corriente. Presentaciones en público. Escritos claros concisos y eficaces mediante recursos informáticos.

Negociación con eficacia de las funciones y recursos a favor del equipo. Buenas relaciones e influencia en los superiores. Acción decisiva y justa al manejar a los subordinados problemáticos.

2. Competencia para la planeación y administración. Comprende las tareas y acciones a realizar, determinar la manera de efectuarlas, asignar los recursos que permitan llevarlas a cabo, y supervisar la evolución para asegurar que se cumplan. Incluye:

Recopilación de análisis de información y resolución de problemas. Supervisión de la información y su empleo para identificar síntomas, problemas y soluciones, que permitan tomar decisiones oportunas. Se corren riesgos calculados y se anticipan consecuencias.

Planeación y organización de proyectos. Se diseñan planes y programas para lograr los objetivos con eficacia. Se establecen prioridades para las tareas y se delega la responsabilidad. Se definen, obtienen y organizan los recursos necesarios para cumplir la tarea.

Administración del tiempo. Se manejan varios asuntos y proyectos a la vez, pero sin tratar de abarcar demasiado. Se supervisa y atiende un programa o se modifica de ser necesario. Se trabaja con eficacia bajo presión de tiempo.

Presupuesto y administración financiera. Se conocen y manejan presupuestos, flujos de efectivo, informes financieros y anuales y se emplea esta información para tomar decisiones. Se llevan registros financieros precisos y completos. Se crean directrices presupuestales para los demás y se trabaja según las directrices señaladas.

3. Competencia del trabajo en equipo. Llevar a cabo tareas con grupos pequeños de personas responsables en conjunto y cuya labor es interdependiente.

Planeación en equipos. Formulación de objetivos claros que motiven a los integrantes del equipo a lograrlos. Los empleados que formaran el equipo se escogen de manera adecuada. Se definen las responsabilidades del equipo en su conjunto y se asignan tareas y responsabilidades individualmente.

Creación de un entorno de apoyo. Se genera un ambiente de reconocimiento, valoración y recompensa al trabajo en equipo. Se ayuda al equipo identificando y consiguiendo los recursos que necesita para la conclusión de sus objetivos. Se interviene como entrenador, asesor y mentor, participando con paciencia con los integrantes del equipo en su proceso de aprendizaje.

Manejo de las dinámicas de equipo. Se deben reconocer las fortalezas y debilidades de los integrantes del equipo y utilizar y potenciar aquellas para que logren sus objetivos en conjunto. Se hacen públicos los conflictos y las discrepancias, sirviéndose de esta estrategia para mejorar el desempeño. El reconocimiento se comparte con los demás.

5. Competencia en acción estratégica. Significa conocer el sector en que se trabaja y el momento en que los cambios en la industria generan amenazas y oportunidades significativas, es mantenerse informado sobre las acciones de los competidores y los socios estratégicos. Se analizan las tendencias generales en la industria y sus repercusiones a futuro.

Comprender la organización. Supone entender los intereses de los participantes. Es conocer las fortalezas y limitaciones de diversas estrategias de negocios. Es entender las diferentes competencias de la organización.

Adoptar acciones estratégicas. Es asignar prioridades y tomar decisiones que guarden congruencia con la misión y los objetivos estratégicos de le empresa y la implementación de la estrategia.

6. Competencia para la globalización. Realizar la labor administrativa de una organización recurriendo a recursos humanos, financieros de información y materiales de diversos países y sirviendo a mercados que abarcan diversas culturas.

7.

Conocimiento y comprensión culturales. Mantenerse informado de las tendencias y los sucesos políticos, sociales y económicos que suceden alrededor del mundo. Supone reconocer el impacto de los acontecimientos mundiales en la organización. Exige entender, leer y hablar con fluidez más de un idioma.

Apertura y sensibilidad culturales. Hay que reconocer la naturaleza de las diferencias nacionales. Étnicas y culturales, y estar abierto a examinar estas disimilitudes con sinceridad y objetividad. Significa ser sensible a los signos culturales y ser capaz de adaptarse con rapidez a las situaciones novedosas. Supone ajustar de manera adecuada el propio comportamiento cuando se interactúa con personas con diversas antecedentes nacionales, étnicos y culturales.

Competencia en el manejo de personal. *Responsabilizarse* de la propia vida dentro y fuera del trabajo. Incluye:

Integridad y comportamiento ético. Normas personales claras que sirvan de fundamento para mantener un sentido de integridad y conducta ética. Significa poseer la disposición para aceptar los errores. Es aceptar la responsabilidad por las acciones propias.

Dinamismo y capacidad de resistencia. Esto exige buscar la responsabilidad, ser ambicioso y estar motivado para lograr los objetivos. Es trabajar duro para que las cosas se concentren. Significa perseverar ante los obstáculos y recuperarse de los fracasos.

Equilibrio en el trabajo y la vida personal. Significa encontrar un equilibrio razonable entre las actividades laborales y personales de modo que no se descuide ningún aspecto de la vida. Es cuidarse, mental y físicamente y servirse de escapes constructivos para dejar sacar la frustración y reducir la tensión. Significa evaluar y establecer objetivos propios en relación con la vida y el trabajo.

Conocerse a sí mismo y desarrollarse. Es contar con objetivos personales y profesionales claros. Supone emplear las fortalezas para obtener ventajas y al mismo tiempo buscar mejorar y compensar los puntos débiles. Es analizar y aprender de las experiencias laborales y de la vida.

## METODOLOGÍA

#### Tamaño de la muestra

Se seleccionaron doce empresas de forma aleatoria, tomando como criterio la existencia de una estructura organizacional con áreas funcionales bien definidas.

#### Tipo de estudio: descriptivo

Se considera como una investigación de tipo descriptivo, puesto que se trata de detallar las características o rasgos más relevantes de los gerentes del sector mueblero de la ciudad de Puebla habilidades y capacidades que les han permitido mantenerse en el mercado. Se pretende describir aquellos aspectos distintivos y particulares de los gerentes.

#### Diseño de la investigación

Se elaboraron dos instrumentos, uno dirigido a los gerentes y otro a los empleados como medio de validación con las personas que integraban su grupo de trabajo con el objetivo de conocer el perfil de competencias del gerente de la pymr del sector mueblero de la ciudad de Puebla,

Competencias			Prom	edio
Años de experiencia directiva en el sector (1)			8	
Formación académica(2)				Alta
Manejo de otro idioma (3)			3.5	
Competencia en la comunicación		6.6		
Comunicación informal				7.0
Comunicación formal			6.2	
Negociación				6.5
Competencia para la planeación y administración		6.9		
Recopilación y análisis de información y resolución de problemas	6.8			
Planeación y organización de proyectos			6.7	
Administración del tiempo			6.7	
Presupuesto y administración financiera			7.0	
Competencia en el trabajo en equipo			6.3	
Planeación en equipos			6.2	
Creación de un entorno de apoyo		6.6		
Manejo de las dinámicas de equipo			6.5	
Competencia en la acción estratégica			6.8	
Entender la industria			7.0	
Comprender la organización			7.0	
Adoptar acciones estratégicas			6.5	
Competencia para la globalización			6.2	
Conocimientos y comprensión culturales		5.5		
Apertura y sensibilidad culturales		7.0		
Competencia en el manejo de personal			6.1	
Integridad y comportamiento ético			6.0	
Dinamismo y capacidad de resistencia			6.5	
Equilibrio entre los asuntos de trabajo y vida personal		5.5		
Conocerse a sí mismo y desarrollarse			6.5	

Tabla 1:Perfil gerencial de la PYME de la industria de Muebles.

(1) Promedio de los años de experiencia directiva en el sector manufacturero de los gerentes entrevistados.

(2) Evaluación de los gerentes en una escala baja a alta, siendo baja sin estudios profesionales, media profesional universitario, y alta profesional con estudios de especialización, maestría, doctorado, diplomados, etcétera.

(3) Evaluación de la gerencia en una escala de 1 a 7, siendo 1 deficiente y 7 excelente. Las excepciones a esta escala se señalan en cada ítem.

Fuente: Elaboración propia con base en trabajo de campo julio 2012 industria de muebles.

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## CONCLUSIONES

El perfil mostró una calificación alta en los gerentes respecto a las competencias investigadas. Los gerentes en su mayoría poseen una visión local y global de su organización. La mayoría de los gerentes mostraron una actitud de liderazgo participativo.

A pesar de que en todas las empresas se aplica la planeación, parece que este ejercicio es utilizado con poca frecuencia para la determinación de riesgos y anticipación de consecuencias. Las pyme de la industria de muebles cuentan con una planeación estratégica para visualizar oportunidades y amenazas próximas.

Todas estas organizaciones están enfocadas hacia el trabajo en equipo, pero en el 30% de ellas no se cuenta con objetivos claros y definidos para estos grupos de trabajo; no cuentan en un 20% con ningún parámetro definido para la elección de los miembros de los equipos, ni con indicadores que evalué el desempeño de los mismos, además en el 25% de ellas cuentan con algun mecanismo de motivación y reconocimiento para el logro de sus objetivos. Cabe notar que a los equipos de trabajo se les brindan todos los recursos necesarios para el desarrollo de la labor, y solo a un 32% se les motivan y se les reconoce su desempeño, por lo general con incentivos monetarios.

Todos los gerentes demostraron un conocimiento aceptable acerca del sector en el que se encuentra su empresa respecto a la industria; además de contar con un amplio conocimiento de su empresa y de los procesos que en ella se llevan a cabo, aspecto que las hace más flexibles y adaptables a las nuevas exigencias del entorno.

Las empresas del sector mueblero de la ciudad de Puebla, aunque cuentan con procesos eficientes para el cumplimiento de altos estándares de calidad y de producción a bajo costo, solo en 2 de ellas se cuenta con una alta capacidad de producción que les permita abarcar mercados internacionales que satisfagan las necesidades de consumo masivo que se demanda en esos mercados.

Los gerentes del sector mueblero logran un equilibrio entre la vida laboral y la personal. La ética es la guía de todas las decisiones que se toman al interior de la organización. Cuando no se concreta algún proyecto o se presenta alguna dificultad, los gerentes reaccionan con calma y tratan de aprender de los errores cometidos para no volver a cometerlos en situaciones futuras.

Estos gerentes son personas que generalmente practican un deporte o realizan actividades constructivas para dejar salir la frustración y reducir la tensión.

El objetivo principal de la labor gerencial de las empresas del sector mueblero de la ciudad de Puebla es la maximización de la rentabilidad, motivo por el cual la organización está orientada hacia la optimización de la cadena productiva, dejando pendientes aspectos relevantes como el bienestar laboral; sin embargo, se le otorga gran importancia a la responsabilidad social.

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# EVALUACIÓN PROCESO INTEGRAL, RESPONSABLE Y RESPETUOSO

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## RESUMEN

su divulgación, así como en la reflexión teórica que se esbozará. Dentro de las modalidades educativas es muy importante citar los enfoques y sus implicaciones; tal es el caso del enfoque centrado en el aprendizaje.

PALABRAS CLAVE: Educación, Evaluación, Aprendizaje.

## EVALUATION PROCESS INTEGRAL, RESPONSIBLE AND RESPECTFUL

## ABSTRACT

This paper is based on the relevance of educational participation, experience and its dissemination as well as theoretical reflection that will be outlined.

Among the types of education is very important quote approaches and their implications, as in the case of learning-centered approach.

**JEL**: 12, I20, I21, N3, N36

**KEYWORDS**: Education, Evaluation, Learning

## INTRODUCCIÒN

El Proceso de Enseñanza- Aprendizaje es algo vivo, algo dinámico que constantemente se debe estar revisando, actualizando y mejorándose, en el mundo actual como lo conocemos encontramos múltiples avances tecnológicos que no existían el siglo pasado, y muy probablemente hoy no existen artefactos que usaran las nuevas generaciones y que definitivamente el entorno de nuestros hijos irá cambiando, por ello y ante esta vertiginosa modalidad de cambio debemos seguir preparándonos, cuestionando y estar a la vanguardia en materia educativa, ya que la educación que recibimos influye directamente el la cosmovisión que tengamos del mundo y de la forma de actuar de la sociedad en general.

## REVISIÒN DE LITERARATURA

El enfoque centrado en el aprendizaje implica un nuevo modo de pensar y desarrollar la práctica docente. Hace ya algunos años que se planteó la diferencia entre la enseñanza de contenidos curriculares que transmitían los docentes como parte de su actividad profesional y el aprendizaje que adquirían los estudiantes a partir de una relación vertical y de enculturación institucional. El resultado de esta manera de realizar la docencia parece conducir a un aprendizaje memorístico, con contenidos a veces aislados y no siempre relevantes para la vida y la resolución de problemas reales de los alumnos. Por su parte, el enfoque centrado en el aprendizaje reconoce la capacidad del sujeto de aprender considerando sus experiencias y conocimientos previos, así como los que se le ofrecen por la vía institucional y por los medios tecnológicos. La premisa de la que se parte es que el estudiante logra de manera efectiva el aprendizaje cuando lo que se le enseña se relaciona con situaciones de la vida real, de ahí que tenga que involucrarse plenamente en el diseño de la estrategia de aprendizaje.

De esta manera, se considera como centro el aprendizaje del estudiante; por lo que se requiere buscar formas diferenciadas de trabajo orientadas a favorecer el aprendizaje autónomo, así como el uso de estrategias de estudio que posibiliten su formación a lo largo de la vida. Es decir, menos centrado en la transmisión de conocimientos academicistas, y más orientado a la gestión del proceso de aprendizaje.

El núcleo de esta postura se ilustra con la afirmación: "el aprendizaje, el pensamiento y el conocimiento son relaciones entre las personas en actividad, y se generan a partir de un mundo estructurado social y culturalmente" (Lave y Wenger, 1991). Entre las premisas que dan cuenta de la vinculación del conocimiento con los contextos en que se construye, se distingue que: No puede esperarse que los participantes en comunidades situadas desarrollen conocimientos abstractos fuera de los significados de la práctica.

## METODOLOGÌA

En este trabajo se hace uso del análisis reflexivo con la intencionalidad de compartir con el lector el ejercicio reflexivo, analítico y hermenéutico que el espíritu humano a través de la palabra puede hacer gala para su expresión, así mismo se pretende sembrar la inquietud en el lector para su posterior profundización.

#### **RESULTADOS, TEMATICA**

Una visión limitada obstaculiza la posibilidad de aplicación del conocimiento que se origina de manera situada hacia otros contextos, de esta manera nuestra mente debe funcionar como un paracaídas, es decir abierto para ejercer su función brillante, por ello debe verse también el proceso evaluativo en la educación como una oportunidad de crecimiento, esta también debe actualizarse, enriquecerse y verse como un proceso necesario para el armónico progreso educativo y social, debemos de cambiar la creencia de que evaluar es solo para detectar fallas, más bien debe verse como parte de un proceso de aprendizaje en fases finales, pero al fin aprendizaje, al cambiar la concepción que se tiene de la evaluación se puede dar un giro positivo en el entorno educativo y coadyuvar a la mejora de la sociedad.

La Educación tiene una gran relevancia en los humanos, ya que adquirimos con el paso del tiempo conocimientos, pero estos sólo se impregnan en nosotros si tienen una relevancia, es decir si para cada uno de nosotros son significativos y útiles en nuestra vida cotidiana, así mismo la enseñanza de los docentes debe ser valiosa, significativa para los tiempos actuales, pertinentes para que sea eficiente y atractiva para los estudiantes, está inmersa en una política de bienestar y es un brazo ejecutor del plan nacional que debe preocuparse por la ciudadanía y su bienestar colectivo.

El foro de Dakar de hace diez años mencionaba que un país sin educación es el que enfrenta retos más fuertes, ya que no tiene un rumbo educativo cierto, y sus recursos humanos no son competitivos en la aldea global, esto trae consigo pobreza, explotación, problemas de salud pública, desesperanza, suicidios a la alza y problemas de paz social entre otras situaciones que pueden disminuir considerablemente con educación de calidad al pueblo.

En numerosos países la exclusión de una gran parte de la población viene propiciada por sus dificultades para acceder a los códigos de la modernidad, es decir, al conjunto de conocimientos y destrezas necesarios no sólo para su integración en la sociedad productiva, sino también para participar en la vida pública. Estos conocimientos y destrezas abarcan también el espíritu crítico, la capacidad para descifrar transmitir esos códigos culturales básicos de la modernidad.

Otro aspecto decisivo para contribuir al desarrollo humano es el logro por los sistemas educativos de actitudes favorables como la responsabilidad, la autoestima, el respeto hacia los demás, la curiosidad, la inclinación al trabajo en equipo y el liderazgo, actitudes decisivas para un cambio de mentalidad y para una inclinación favorable hacia el desarrollo.

La exigencia de que hombres y mujeres reciban un tratamiento igual en educación o la existencia de políticas compensatorias destinadas a promover mayores niveles de educación para las mujeres, no sólo constituyen un mecanismo de justicia social sino también vienen respaldadas por pruebas convincentes de los beneficios generales que aportan, tanto a las mujeres como a los hombres.

El tema posee relevancia en el sentido de que la calidad de vida por la que se lucha hoy en día, puede darse de mejor manera con aspectos integrales, es decir uno de los puntos fundamentales es el educativo, trabajo que debe ser pieza clave para el progreso social, al tratar entonces este para lograr un soporte estructural de capital intelectual que otorgue al país una ventaja competitiva frente a la exigente realidad que vivimos, es entonces que podremos competir de mejor manera con el extranjero, con conocimiento, ciencia y tecnología para nuestro propio bienestar y el de los demás.

Vivimos en una época de enormes transformaciones sociales, debidas en gran medida al desarrollo científico-técnico. La sociedad del conocimiento, como es definida actualmente, se caracteriza por el papel que juegan la ciencia y la tecnología en el desarrollo socio-económico, hasta el punto de considerarse que están abocadas a sustituir al factor capital en las relaciones de producción, por constituir el principal recurso productor de riqueza. Un país que desee ser verdaderamente independiente debe garantizar a todos sus ciudadanos la oportunidad de adquirir conocimientos sobre la ciencia y la tecnología, debe fomentar la capacidad de dar a ambas un uso apropiado y de desarrollarlas para satisfacer necesidades colectivas.

La educación es, por lo tanto, un factor decisivo para la socialización de los jóvenes para la transmisión de los valores relacionados con la ciudadanía, la democracia, la solidaridad y la tolerancia. Constituye también un elemento vital para facilitar la participación activa de todos los ciudadanos en la sociedad y para la integración en el interior de cada país de los excluidos de los beneficios del desarrollo. La educación conduce a la creatividad individual y mejora la participación en la vida social, económica, cultural y política de la sociedad.

La educación debe preparar a las generaciones futuras para hacer frente a los problemas que plantean los progresos de la ciencia y la tecnología y para determinar qué aplicaciones serán beneficiosas y cuáles pueden ser nocivas. Asimismo, debe propiciar una «alfabetización científica» de toda la población, con el fin de formar ciudadanas y ciudadanos críticos y capaces de examinar la naturaleza de la ciencia y la tecnología como actividades humanas encaminadas al desarrollo individual y colectivo.

Por último, habría que señalar que la educación, además de su valor económico, constituye un derecho social, por lo que no se deben olvidar las dificultades y los logros que han supuesto su universalización y consagración como tal derecho. En la actualidad debe responder a nuevas exigencias y a retos renovados, ya que no basta con asegurar un cierto nivel de educación a todos los ciudadanos, ni su consideración como un proceso que termina a cierta edad. Hoy los poderes públicos deben potenciar una educación que dure toda la vida, ya que ninguna nación puede aspirar a la competitividad sin aprovechar el potencial del recurso más valioso: su capital humano.

Todo proceso educativo debe contemplar aspectos contemporáneos de evaluación, es decir ir más allá de lo que el examen revela en el aula, se debe complementar con diversas evidencias de portafolio, tareas,

resolución de casos, investigaciones, proyectos entre otros, pero sin duda debemos evaluar el impacto social de los egresados de alguna profesión o curso, idear un instrumento de seguimiento, ver de alguna manera como ha avanzado y modificado su vida el proceso de enseñanza aprendizaje y se puede cruzar entonces el aspecto humanístico y económico para ver la efectividad, bondad o deficiencia del programa educativo.

Hay que innovar en el campo de la evaluación educativa, ver este proceso como algo necesario, humano, perfectible y reconocer en el evaluado a una persona con sentimientos, emociones, sueños y esperanzas, digno de respeto y consideración, la evaluación debe sobrepasar los aspectos del mero proceso, debe convertirse en enseñanza, en pilar educativo y en un momento agradable al espíritu humano incansable y dinámico.

La constante revisión de los procesos es pertinente y necesario, ya que el entorno es cambiante y muy dinámico, en la práctica docente es un compromiso el ser innovador, pues cada alumno es distinto, único y con una historia propia, por ello se debe de generar nuevas formas de impartir la clase, usando múltiples herramientas como lo son documentos electrónicos, computadoras, proyectores, internet, entre otros y cada cambio en ello representa un ajuste en la evaluación.

La actitud es también algo a renovar, pues el hombre al ser un ente vivo y en contacto con el medio ambiente, está en posibilidad de aprender y poner en práctica nuevos métodos, formas y de cambiar su propia cosmovisión de la vida y del ámbito educativo.

Hoy en día en los distintos niveles de educación se ve reflejado alguna influencia externa al plan que lleva el docente del manejo de clase, en distintas fases podemos ver que el docente presenta cuestionamientos lógicos al plan realizado y se ve en la necesidad de aprobar lo que se ha hecho o bien refutar ciertos puntos y re-virar el rumbo, y parte de ello es gracias a que está más informado y puede unir elementos conceptuales para plasmarlo en una praxis educativa que aporte conocimiento útil y pertinente a los estudiantes.

Por otro lado los estudiantes que tienen acceso a un mundo de información gracias a varias fuentes tecnológicas que hace 20 años no estaban tan desarrolladas como hoy y que la economía de mercado ha permitido que educandos de clase media puedan tener acceso a computadoras e Internet en sus casas las 24 horas del día los 365 días del año, ha revolucionado la forma de ver el mundo, ha propiciado avances y retrocesos en la cultura de los jóvenes y esto impone un nuevo reto a la sociedad, pues el docente debe estar informado y tener tiempo para investigar qué información es válida y cual es paja sin fondo y sustento, ya que mucha de la información electrónica no es de fiar y el actor del binomio enseñanza-aprendizaje que es el enseñante tiene que enseñar correctamente, en tiempo, en forma y en contenido, algo que se escribe tan fácil, pero que al ejercerse conlleva grandes esfuerzos y preparación continúa, un reto importante para el docente.

La psicología aporta su conocimiento a la educación y muestra lo complejo del fenómeno a estudiar, pues pensemos:

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¿Cómo aprendemos?
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¿De qué depende la velocidad del aprendizaje?

¿Cómo medimos el aprendizaje?

¿Cuál es la manera correcta de enseñar?

¿Cuál es la manera correcta de aprender?

Es difícil y complejo responder estas preguntas, sin embargo un punto de vista de cada cuestionamiento será mencionando aquí, ya que no se sabe con certeza si todos aprendemos de la misma manera, de la misma fuente y si a una velocidad igual, si estas preguntas no han tenido respuesta exacta, ahora bien pasemos a las otras, el aprendizaje más que medirse se estima, pues ¿cómo mediremos algo que no vemos?, pero si cuantificamos en estimaciones con cuestionarios, con pruebas o instrumentos de

evaluación, o bien observaremos por un tanto tiempo determinado el comportamiento de una persona a través de su vida y de enfrentar distintas situaciones y analizar como las resuelve.

En nuestra escuela a través del ejercicio docente se ha observado a estudiantes que aprenden mejor escuchando y otros viendo, pero también hay los que hacen las cosas, los que además de esto cuestionan, practican y vinculan lo visto en el salón de clase a la vida cotidiana, cada uno es especial, es diferente, único e irrepetible, por ello el resultado del análisis reflexivo es por el momento como una fotografía, valida como un registro que da información, pero lo mas importante es que se convierte en una película, es decir en fotografía en movimiento, esto al seguir estudiando, generando nuevo conocimiento, incluyendo otros análisis reflexivos que animen al lector a pensar, a cuestionarse y a sostener intercambio de ideas con algunos colegas y con la sociedad en general.

#### CONCLUSIONES

En materia de educación debemos ir mas allá, es decir debemos pensar en la implementación de un sistema soportado en medios tecnológicos que nos permitan ver la carta de registro escolar, para en ella tener un seguimiento al alumno a través de sus diferentes niveles educativos, así mismo analizar su desarrollo profesional para saber si el impacto social en materia educativa esta siendo adecuado a las expectativas propuestas, ver a través de cuestionarios la estimación de grados de felicidad y contrastarlo con índices de desarrollo humano, tal vez esto suene muy ambicioso para el caso de un país como México que esta en vías de desarrollo y que cuya sociedad es muy compleja, pues cada región y cada entidad tiene rasgos muy particulares, el Norte del país presenta polos importantes de desarrollo como lo son Monterrey, Saltillo, Chihuahua entre otros y existen en contraste entidades con mayor índice de pobreza y rezago educativo como guerrero, Oaxaca y Michoacán, sin embargo la propuesta debe comentarse y precisamente se debe poner atención en lugares con rezago educativo, para que el nivel de progreso social se eleve en cada entidad, fortalecer programas de gobierno y estimular al desarrollo de una política Pública que transforme en acciones la retorica de progreso y educación para todos, que realmente se puedan ver aterrizadas las frases dichas sobre ese dinamismo y progreso, pues si se establecen los mecanismos de instrumentación y se le da un seguimiento a ello, seguramente el país podrá estar mejor y exportemos talento a otros países y no solo mano de obra, la meta para los Mexicanos es desarrollar el talento humano y generar "Mente-factura" y no sólo Manufactura, para ello se deben tomar acciones que coadyuven al progreso.

Por ende la evaluación sigue en constante movimiento, adaptándose a los retos actuales y generando para nuevos procesos, formas pertinentes para su evaluación, tal es el caso de la evaluación en procesos mediados por tecnología educativa, esto debe servir para hacer ese comparativo entre lo obtenido y lo esperado y ver que esa brecha sea menor, la evaluación es un proceso dinámico, coadyuvante de la mejora y una oportunidad de aprender. Hay que procesar en nuestras mentes el hecho de que hoy en día lo único constante es el cambio y entonces generar un cambio en nosotros mismos.

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# LA ACCIÓN TUTORIAL EN LA FORMACIÓN DEL ESTUDIANTE UNIVERSITARIO NICOLAITA

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## RESUMEN

La Acción Tutorial en la formación académica del estudiante universitario Nicolaita, es un aspecto que nos interesa compartir, una vez que se ha realizado un trabajo de investigación con la participación de 116 estudiantes, de una población de 1088 sujetos, que respondieron a un cuestionario de 96 ítems de preguntas de respuesta cerrada (90) y de respuesta abierta (6). Los criterios que se tuvieron en cuenta para incluir a los sujetos en el estudio fueron: tener formalmente asignado un tutor o tutora al menos durante un ciclo escolar y haber participado en actividades de tutoría, tales como entrevistas personalizadas o reuniones grupales con su tutor o tutora, o actividades promovidas por el programa de tutoría.

**JEL**: I23, I21

PLABRAS CLAVE: Tutoría, Acción Tutorial, Formación Académica

## INTRODUCCIÓN

La adopción de un nuevo paradigma en la enseñanza superior sitúa al estudiante en el centro del proceso de enseñanza-aprendizaje, y lo erige en protagonista del mismo y, por tanto con la responsabilidad de gestionar los conocimientos que le llegan por diferentes vías, hasta convertirlos en aprendizaje significativo y funcional. El protagonismo que adquiere el estudiante relega a un segundo plano al profesor, que se convierte en un guía, un facilitador de los recursos y de los escenarios para que el estudiante desarrolle todo su potencial cognitivo, pero también afectivo, emocional, social; en definitiva, para alcanzar el desarrollo integral del mismo.

En este contexto son muchas las necesidades a las que el sistema universitario ha de dar respuesta (García Nieto, 2008). Algunas de estas necesidades se refieren a la masificación de las aulas en algunas titulaciones, la complejidad de la propia institución, la apertura y diversificación del curriculum, el índice de fracaso académico, el nivel de madurez y autonomía que se requiere del estudiante, etc.

Todos estos cambios, apuntan a la necesidad de que el estudiante universitario cuente con los servicios y recursos apropiados para que su tiempo en la universidad sea un tiempo fructífero a nivel académico, pero también a nivel personal, de manera que se logre el objetivo que aparece recogido en el Informe Delors (1996), el desarrollo integral de la persona.

Y es aquí donde la tutoría adquiere un papel protagonista para armonizar todo el proceso, asesorando, guiando y apoyando al estudiante, sirviéndole de guía y humanizando las relaciones interpersonales en la universidad. En este sentido, García Nieto (2010) considera que desde la función orientadora y tutorial es preciso trasmitir valores, suscitar actitudes, desarrollar criterios, perfeccionar y depurar estilos y modos de comportamiento, y esto implica que no sea posible separar la información de la formación.

## ANTECEDENTES

En la actualidad en México la orientación universitaria y la tutoría se han convertido en una práctica muy extendida, así vemos que ha sido el tema central de debate de muchos de los congresos celebrados en los últimos años en el mundo universitario mexicano, considerada en todos ellos como un aspecto clave a tener en cuenta en la educación universitaria. A nivel nacional las Instituciones de Educación Superior (IES) mexicanas, están viendo surgir procesos de acreditación e iniciativas de evaluación como medios importantes en la búsqueda de calidad educativa. México, como muchos otros países, está empeñado en la mejora continua de la calidad de su sistema de educación superior para ser capaz de competir en un mundo globalizado y cambiante que presenta numerosos desafíos. Por ello, la organización que agrupa a las Instituciones de Educación Superior (IES), han impulsado a sus instituciones a llevar a cabo procesos de auto-estudio institucional y evaluación de programas académicos (ANUIES, 1979).

La tutoría universitaria es un elemento importante a considerar cuando se habla de calidad en la educación superior, y en la Universidad Nacional Autónoma de México, se considera fundamental para resolver algunos de los problemas que más inciden en su sistema universitario, la deserción, el abandono de los estudios, el rezago y la baja eficiencia terminal, principalmente (ANUIES, 2000).

La Universidad Michoacana de San Nicolás de Hidalgo (Nicolaita) en el año 2000, establece el Programa Institucional de Acción Tutorial (UMSNH. 2009), con el objeto de definir las directrices, objetivos, servicios y mecanismos de evaluación de los Planes de Acción Tutorial de cada unidad Académica, para apoyar a los alumnos en su formación integral a través de la atención y seguimiento personalizado de los docentes, los cuales, además de orientar e informar sobre la organización y procedimientos institucionales, atenderán los aspectos cognoscitivos y afectivos del aprendizaje para que el estudiante desarrolle los conocimientos básicos o disciplinarios, técnicos, científicos, sociales y culturales que demande su formación y adquiera habilidades y destrezas que le permitan concluir sus estudios o continuar con otro nivel formativo y redefinir o confirmar actitudes, aptitudes y valores que lo determinan como sujeto social.

La Facultad de Arquitectura, en el curso 2001-2002 inicia una experiencia relacionada con la tutoría de sus estudiantes que parte de una evaluación de las necesidades, del resultado de dicha evaluación, se detectan las necesidades siguientes:

- Orientación para la optimización de habilidades docentes.
- Apoyo a la innovación en la oferta de enseñanza –aprendizaje.

• Asesoría para la profesionalización de los contenidos, de acuerdo a la Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES), y de los procesos de enseñanza.

• Ayuda para diseñar y desarrollar un sistema de tutoría para el aprendizaje.

En definitiva, el papel de los docentes universitarios en la actualidad implica una forma diferente de enseñar y de individualizar la enseñanza que requiere el diseño de procesos diferentes, nuevos escenarios y ritmos de trabajo que promuevan y faciliten la formación intelectual de estudiante y la adquisición de competencias propias de la profesión que va a desempeñar en el futuro, pero también su desarrollo personal y social. En base a los resultados obtenidos en la evaluación mencionada, se diseña un Programa de Tutoría para la Facultad de Arquitectura de la UMSNH dirigido a los estudiantes Nicolitas, con los siguientes objetivos:

1. Fortalecer la atención del estudiante durante su proceso de formación profesional.

- 2. Involucrar más activamente a los docentes en el apoyo de plan de vida y carrera del alumnado.
- 3. Ayudar a mejorar el rendimiento académico e incrementar la probabilidad de éxito en sus resultados.
- 4. Promover el desarrollo de métodos de estudio y el auto aprendizaje.
- 5. Retroalimentar el sistema de enseñanza aprendizaje.
- 6. Propiciar la permanencia de los estudiantes en su elección profesional.
- 7. Propiciar el aumento del índice de eficiencia terminal.
- 8. Estimular el interés del alumno por su propia carrera.
- 9. Elevar la calidad del proceso educativo.
- 10. Propiciar la formación integral del estudiante.
- 11. Hacer responsable al estudiante de su propia formación.

Las dos figuras con mayor grado de implicación en la interacción tutorial son: el tutor, docente que realiza esta actividad complementaria; y el tutorado, estudiante que es beneficiario de este servicio. Por ello, es fundamental conocer cómo están viviendo el proceso y cómo perciben los efectos del programa de tutoría.

#### DISEÑO Y DESARROLLO METODOLÓGICO

#### Objetivo general:

El objetivo del trabajo que se presenta es obtener información acerca de la percepción que tienen los estudiantes de nivel superior sobre el impacto que la tutoría institucionalizada tiene en el desarrollo integral y humano del estudiante, en los distintos ámbitos que guían la intervención orientadora: escolar, académico-profesional y, de desarrollo personal y social del alumnado. Metodología.

Dadas las características del objeto de estudio, que no permite controlar los efectos directos e indirectos de unas variables sobre otras, se ha optado por una metodología de investigación no experimental o ex post- facto (Bernardo y Calderero, 2000). Muestra.

A partir de una población de 1088 estudiantes Nicolaitas, se ha seleccionado una muestra representativa de 116 sujetos. Los criterios que se tuvieron en cuenta para incluir a los sujetos en el estudio fueron: tener formalmente asignado un tutor o tutora al menos durante un ciclo escolar y haber participado en actividades de tutoría, tales como entrevistas personalizadas o reuniones grupales con su tutor o tutora, o actividades promovidas por el programa de tutoría.

La mayoría de las personas que han participado en nuestra investigación han sido varones (74%), con edades comprendidas entre los 18 y los 23 años (84%), están cursando el tercer semestre de la Licenciatura de Arquitectura (39%), seguidos por los estudiantes que cursan el décimo semestre (25%) o están en el primero (13%) o en el segundo semestre (14%). Esta dispersión nos ha permitido obtener la visión tanto de los estudiantes que empiezan, como de aquellos que ya están finalizando sus estudios. Han elegido esta carrera por vocación (94%), y todos (100%) han participado del programa de tutoría, generalmente grupal (77%), durante un semestre (58%). Son estudiantes (27%), ya que proceden de la región de Morelia (25%) y Pátzcuaro (32%). La mayoría no realiza ninguna actividad remunerada (76%) y no tiene dependientes económicos (68%).

Los estudiantes de la muestra respondieron a un cuestionario elaborado para esta investigación que consta de 96 ítems; (90) preguntas de respuesta cerrada tipo Likert, (ordenadas conforme a la escala: 1-Totalmente de acuerdo; 2-De acuerdo; 3- En desacuerdo y 4-Totalmente en desacuerdo), para obtener datos cuantitativos y (6) preguntas de respuesta abierta que permitieran a los estudiantes expresar

libremente sus opiniones. Presentaremos los resultados correspondientes a los ítems 62 al 86, que serán descritos con detalle más adelante, y que fueron contestados por 104 sujetos. Para determinar la calidad de la medición (McMillan y Schumacher; 2005: 215), nos cercioramos de que el instrumento construido contara con los requisitos de validez, confiabilidad, y objetividad (Hernández et al., 2007). Los datos cuantitativos obtenidos han sido procesados y analizados con el paquete estadístico para Ciencias Sociales "Statistical Package for Social Sciences" (IBM-SPSS-19.0), que nos ha permitido realizar análisis descriptivos básicos (frecuencias, porcentajes) y obtener sus respectivas representaciones gráficas, y análisis de contingencia.

#### Dimensiones y Variables de Estudio.

Las variables analizadas en el trabajo global se agruparon en cuatro dimensiones: Dimensión I: Características socio-demográficas de la muestra; Dimensión II: Información que reciben los estudiantes a través de la actividad tutorial; Dimensión III: Percepción de la formación adquirida por el estudiante a través de la acción tutorial; Dimensión IV: Valoración de los estudiantes de la actividad tutorial. En este Trabajo solo abordaremos la dimensión III, en esta dimensión se estudió la percepción del estudiante Nicolaita sobre el impacto de la acción tutorial en un eje de influencia (Tabla 1).

#### Tabla 1: Dimensión III y variables correspondientes

DIMENSIÖN III. Percepción de la formación adquirida por el estudiante a través de la actividad tutorial.

Incluye las variables: Sentirse parte de la institución; aprovechar los programas y servicios que ofrece la institución; Participar en actividades deportivas, culturales y recreativas de la institución; Integrarse al grupo-clase o a diversos grupos académicos; valorar las consecuencias de la propia decisión vocacional; Reconocer la importancia de construir un proyecto de vida; Mejorar habilidades para trabajar en equipo o en grupos de trabajo académico; reconocer las propias fortalezas y debilidades como estudiante; mejorar el aprovechamiento académico; desarrollar o mejorar hábitos de estudio y estrategias para aprender; aprovechar fuentes de información de utilidad para el desarrollo profesional; comunicar ideas de forma clara y segura; comunicar sentimientos de forma constructiva; ser responsable con los compromisos académicos; desarrollar una actitud ética en la formación profesional; capacidad de relacionarse y resolver conflictos con los demás; argumentar y defender los propios intereses; tomar decisiones de manera independiente y fundamentada; planear las actividades escolares; definir con claridad metas para el propio proyecto de vida; desarrollar valores y actitudes favorables para mantenerse sano(a) física y mentalmente; adaptarse al ambiente de la institución.

DIMENSIÖN III. Percepción de la formación adquirida por el estudiante a través de la actividad tutorial. Incluye las variables: Sentirse parte de la institución; aprovechar los programas y servicios que ofrece la institución; Participar en actividades deportivas, culturales y recreativas de la institución; Integrarse al grupo-clase o a diversos grupos académicos; valorar las consecuencias de la propia decisión vocacional; Reconocer la importancia de construir un proyecto de vida; Mejorar habilidades para trabajar en equipo o en grupos de trabajo académico; reconocer las propias fortalezas y debilidades como estudiante; mejorar el aprovechamiento académico; desarrollar o mejorar hábitos de estudio y estrategias para aprender; aprovechar fuentes de información de utilidad para el desarrollo profesional; comunicar ideas de forma clara y segura; comunicar sentimientos de forma constructiva; ser responsable con los compromisos académicos; desarrollar una actitud ética en la formación profesional; capacidad de relacionarse y resolver conflictos con los demás; argumentar y defender los propios intereses; tomar decisiones de manera independiente y fundamentada; planear las actividades escolares; definir con claridad metas para el propio proyecto de vida; desarrollar valores y actitudes favorables para mantenerse sano(a) física y mentalmente; adaptarse al ambiente de la institución.

#### RESULTADOS

La mayoría de estudiantes Nicolaitas encuestados, manifiestan que las actividades de tutoría ha tenido un efecto positivo en su formación tanto a nivel académico como personal, facilitando el aprovechamiento de los recursos y servicios de la institución y la integración activa en la vida universitaria. Así, el 77,9 % de los alumnos encuestados percibe que, le ha apoyado en su formación para sentirse parte de la institución.

Sin embargo, el 22,1% están en desacuerdo con la afirmación. Este porcentaje que representa a casi la cuarta parte de los sujetos del estudio, ha de ser tenido en cuenta, pues significa que una parte de los estudiantes no están percibiendo los efectos positivos que ha de tener la tutoría en su formación. Una variable que acumula un importante porcentaje de respuestas positivas es la que tiene que ver con los efectos que ha tenido la tutoría en el compromiso de los estudiantes con su formación profesional (83,7% de acuerdo). También encontramos un alto porcentaje de acuerdo en otras variables relacionadas con el desarrollo profesional del estudiante: Valorar las consecuencias de la propia decisión vocacional (72,4% de acuerdo); Desarrollar una actitud ética en mi formación profesional (76,2% de acuerdo); Definir con claridad metas para el propio proyecto de vida (77,7% de acuerdo). Asimismo, los estudiantes están en su mayoría de acuerdo, con puntuaciones superiores al 70%, en que la tutoría ha sido beneficiosa para su formación en las estrategias y habilidades que han de desarrollar y aplicar a su trabajo universitario, como las habilidades para trabajar en equipo (77,1% de acuerdo), los hábitos de estudio y estrategias para aprender (72,9% de acuerdo), saber comunicar las ideas de forma clara y segura (71,4%), planear las actividades escolares (73,1% de acuerdo).

Es importante destacar que la participación en las actividades de tutoría tiene efectos positivos, o al menos así lo percibe la mayoría de los estudiantes, en su formación como personas, Ser responsable en las diferentes situaciones vitales que se presenten (79,8% de acuerdo). No obstante, hemos de mencionar aquellas variables donde los porcentajes de desacuerdo superan el 25% y que están relacionados con temas que atañen al desarrollo integral de la persona. En este sentido, algunas variables que podrían ser analizadas de forma más detenida serían: Desarrollar valores y actitudes favorables para mantenerme sano(a) física y mentalmente (31,1% de desacuerdo), Tomar decisiones de manera independiente y fundamentada (30,8% de desacuerdo). Es decir, más de la cuarta parte de los sujetos del estudio no perciben que la tutoría haya mejorado su formación en estos temas, que son importantes si queremos lograr que la persona desarrolle todas sus capacidades de forma armoniosa.

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#### BIOGRAFIA

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## RESUMEN

La presente investigación tiene como objetivo evaluar una muestra de la industria maquiladora del sector electrónico en Tijuana Baja California, México, bajo un enfoque de sustentabilidad competitiva. Tomando como referencia para su evaluación el modelo PER, Agenda 21, la norma ISO 14001 y el modelo de Competitividad Sistémica. Aplicando como instrumento metodológico, un cuestionario dirigido a los directivos de alto nivel de estas industrias. Los resultados obtenidos muestran, que las industrias analizadas bajo el enfoque de competitividad, cumplen con los estándares internacionales de productividad, sin embargo en cuanto al enfoque sustentable, los resultados nos reflejan que gran parte de estas industrias cuentan con certificaciones de protección al medio ambiente utilizando tecnologías sustentables en algunos de sus procesos. Se concluye que es de gran importancia para el establecimiento de estas industrias en zonas metropolitanas, que cuenten con políticas y metas ambientales vinculadas a la competitividad, que impulsen el desarrollo económico de la región.

PALABRAS CLAVES: Evaluación, Industria Maquiladora, Sector Electrónico, enfoque Sustentable Competitivo.

## EVALUATION OF THE MAQUILADORA INDUSTRY ELECTRONICS SECTOR, UNDER A COMPETITIVE SUSTAINABLE APPROACH

## ABSTRACT

This research aims to evaluate a sample of industry maquiladora in Tijuana Baja California, Mexico electronic sector, with a focus on competitive sustainability. Taking as a reference for its assessment model PER, Agenda 21, the ISO 14001 standard and the model of systemic competitiveness. Applying as a methodological instrument, a questionnaire addressed to the managers of high level of these industries. The results show, that industries analyzed under the focus of competitiveness, comply with international standards of productivity, however as to the sustainable approach, the results show us that most of these industries have certificates of protection for the environment using sustainable technologies in some of its processes. We conclude that it is of great importance for the establishment of these industries in metropolitan areas, which have policies and environmental goals linked to competitiveness, encouraging the economic development of the region.

**JEL:** L60,L63,M14,O14,P48,P52,Q01,Q28,Q57,R58

**KEYWORDS:** Maquiladora industry, electronic sector, competitive sustainable approach.

#### INTRODUCCIÓN

Esta investigación surge a partir de la importancia de la instalación de industria maquiladora en México y en particular del sector electrónico en la ciudad de Tijuana Baja California, como impulsor de desarrollo económico en la región de la frontera norte del país, destacando por tener fuertes vínculos con países como Estados Unidos, Canadá y algunos países asiáticos como Corea, China y Japón entre otros, así mismo cuenta con el mayor número de empresas maquiladoras de este sector (122)\* en el país, y el primer lugar en cuanto a la generación de empleos maquiladores y el tercer lugar en cuanto a la derrama en sueldos, salarios y prestaciones pagadas por este tipo de empresas.

Esta industria debido a sus características específicas, origina una importante demanda de recursos naturales y de servicios públicos, lo que se traduce en una gran presión ambiental\*\* .Tomando en cuenta por otra parte, que estas industrias son evaluadas de acuerdo a factores establecidos bajo modelos aplicables de manera general, para todos los sectores productivos, lo que resulta en una evaluación parcial, para esta industria y aún en menor medida para el sector electrónico.

Sobre la base de las consideraciones anteriores, esta investigación tiene como propósito evaluar al sector electrónico de la industria maquiladora, bajo un enfoque de sustentabilidad competitiva, con el objetivo de distinguir los avances y tecnologías sustentables implementadas en los procesos productivos de estas industrias fortaleciendo su competitividad internacional y favoreciendo el desarrollo de la región.

#### **REVISIÓN DE LITERATURA**

La industria Electrónica en el Estado de Baja California, se ha convertido en una de las regiones más importantes del Norte y Latinoamérica, para la manufactura de productos electrónicos, con 203 industrias maquiladoras (ver gráfica 1), principalmente de origen asiático y estadounidense estadísticas de la Secretaría de Economía de Baja California (2009). Algunos de los productos electrónicos manufacturados en Baja California son: tableros de circuitos impresos, televisores, teléfonos celulares, computadoras, radar marino de ondas sonoras, microchips y semiconductores, en compañías de clase mundial, manufacturando más de 19 millones de televisores de alta tecnología por año -LCD, Plasma, HD, LED-, empleando más de 94 mil personas. Contando la región con importantes firmas mundiales establecidas, que realizan principalmente operaciones de manufactura, distinguiéndose corporativos como: Toyota, LG Electronics, Honeywell, Delphi, Hyundai, Matsushita, Mitsubishi, Samsung, Sanyo, Sony, Thomson, Sharp, Cardinal Health, Emerson, Kenworth, Lockheed Martin, Kyocera, Panasonic, Skyworks, Smiths, Tyco, entre otras más.

La industria electrónica en el estado de Baja California ha mostrado una dinámica de crecimiento industrial sin precedentes en los últimos años. Que ha implicado cambios fundamentales en la educación, en lo social y en las áreas de servicios tanto públicos como privados de la región.

\*Fuente: datos estadísticos de SEDECO y la Industria Maquiladora, 2010.

\*\*Fuente: Carrillo, "El medio ambiente y la maquila en México" CEPAL, 2005.

Por otra parte, Baja California ocupa el primer lugar a escala nacional en número de empresas maquiladoras dedicadas a la electrónica, el indicador de empleo constituye también el primer lugar entre los estados de la frontera norte, comprendida por Baja California, Sonora, Coahuila, Chihuahua, Nuevo León y Tamaulipas. Donde la participación de la industria electrónica se encuentra concentrada principalmente en los municipios de Tijuana, con un 60.5%; Mexicali, con un 21.6%; Tecate con 10.8% y Ensenada y Rosarito con el 7%.

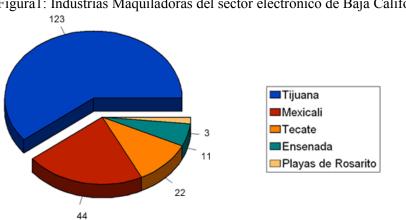
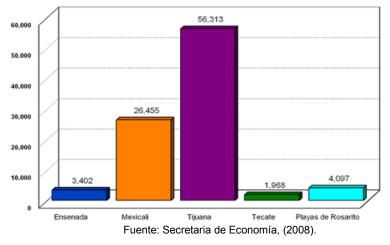


Figura1: Industrias Maquiladoras del sector electrónico de Baja California

Fuente: Secretaria de Economía, del Gobierno del Estado de Baja California (2008).

Al analizar al personal ocupado que labora en la industria electrónica de maquila por municipio, encontramos que Tijuana abarca al 69% del personal ocupado y Mexicali constituye el 21%, lo que engloba al 90% de la ocupación laboral del sector maquilador de la industria electrónica.

Figura 2: Generación de empleo de la IME, en Baja California



En la ciudad de Tijuana B.C., el establecimiento de industrias maguiladoras del sector electrónico, han tenido un fuerte impulso a partir de la década de 1980, esto debido las ventajas competitivas que representa el establecimiento de estas empresas en la zona fronteriza con Estados Unidos, adicional a la calidad de mano de obra y de la iniciativa del gobierno para atraer capitales extranjeros, que creen empleo y desarrollo en la región. Con inversiones de 1,129 miles de millones de dólares; casi el doble de otros sectores tradicionales como el textil y vestido, automotriz y químico.

Tabla 1: Compañías importantes de clase mundial establecidas en Tijuana, B.C.					
SONY	KYOCERA	PANASONIC			
JVC	SAMSUNG	<b>TYCO ELECTRONICS</b>			
PLANTRONICS	SANYO	LG ELECTRONICS			
SKYWORKS	HITACHI	BOSE			
DELPHI	SHARP	MITSUBISHI			
FURUKAWA	SMK	MUREKATA			

Tabla 1: Compañ	iías importantes d	de clase mundial	establecidas en	Tiinana BC
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Fuente: Elaboración propia, en base a datos del directorio de la industria maquiladora.

#### Enfoque de Competitividad

Michael Porter, (1990), define a la competitividad como: "La competitividad de una nación depende de la capacidad de su industria para innovar y mejorar. Las compañías ganan ventaja sobre los mejores competidores del mundo, debido a la presión y al reto. Se benefician de tener fuertes rivales nacionales, agresivos proveedores con base en su país y clientes exigentes".

#### Desarrollo Sustentable

El desarrollo sustentable no es únicamente un concepto de eficiencia en el uso de los recursos sino también de equidad (Díaz, 2007), con una doble implicación en este sentido:

Equidad intrageneracional. La satisfacción de las necesidades de la generación actual es premisa imprescindible para alcanzar el desarrollo sustentable global, independientemente de la localización geográfica. Ello requiere solución a los problemas de pobreza en los países en vías de desarrollo y, por lo tanto, la redistribución geográfica de la riqueza y el progreso.

Equidad intergeneracional. El desarrollo sustentable es un concepto dinámico y, por ello, el legado de recursos para la siguiente generación ha de ser, al menos, igual que el disponible para la generación actual. Esta segunda cuestión nos conduce a reflexionar sobre el horizonte temporal que se tiene en cuenta.

En México, en 1988 con la Ley General de equilibrio Ecológico y Protección al Ambiente, donde se concibe al desarrollo sustentable, como; "El proceso evaluable mediante indicadores de carácter ambiental, político y social que tiende a mejorar la calidad de vida y la productividad de las personas" que se fundamenta en medidas apropiadas de preservación del equilibrio ecológico, protección al ambiente y aprovechamiento de los recursos naturales, de manera que no se comprometa la satisfacción de las necesidades de las generaciones futuras", (Nebel y Wrigth, 1999).

#### Modelo de evaluación de Sustentabilidad: PER

El Modelo PER identifica tres aspectos básicos: las presiones que recibe el ambiente, la situación del estrato ambiental afectado y la respuesta de la sociedad. La figura siguiente muestra el modelo P-E-R de manera gráfica.

#### Figura 3: Modelo PER



## METODOLOGÍA

La gestión del desarrollo sustentable y el cuidado del medio ambiente son cruciales para el éxito de todas las empresas públicas y privadas. Particularmente las organizaciones industriales deben definir adecuadamente los indicadores para evaluar su capacidad de sustentabilidad en sus actividades productivas para cumplir con las expectativas de los grupos de interés para lograr su competitividad dentro de los mercados internacionales, aplicando las políticas y normas establecidas internacionalmente bajo el modelo PER, basados en el equilibrio del medio ambiente y el bienestar de las personas, así como la adopción de ISO 14001 y auditorias en conjunto con las reglamentaciones establecidas por las leyes mexicanas por medio de las dependencias federales, estatales y locales de SEMARNAT/Profepa para evaluar su desempeño y determinar indicadores de innovación y desarrollo en el uso de tecnologías sustentables. Basado en la aplicación de un Sistema de Gestión del Medio Ambiente (SGA), puede reducir costos, mejorar la eficiencia y dar una ventaja competitiva a las empresas.

Esta investigación tiene un enfoque cualitativo y su alcance es un caso de estudio de la industria maquiladora del sector electrónico de carácter exploratorio, con el objetivo de evaluar a las industrias maquiladoras específicamente de la ciudad de Tijuana Baja California, bajo un enfoque de competitividad y desarrollo sustentable. Mediante un análisis asociado a las estrategias de organización de estas industrias, que se vincula con su estructura, capacidad, tecnología de innovación, proveedores certificados y número de personal empleado así como la relevancia del cuidado al medio ambiente mediante prácticas de desarrollo sustentable en sus actividades productivas.

Se diseño como instrumento un cuestionario, construido con un total de 117 ítems, los cuales fueron seleccionados y analizados de manera rigurosa, por su relevancia y adecuación para la industria maquiladora del sector electrónico de acuerdo a los estándares internacionales. Para aplicarse a la muestra seleccionada de diez industrias de clase mundial más representativas en tamaño y empleados en la localidad.

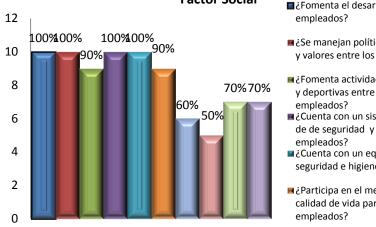
## RESULTADOS

De acuerdo al análisis de los factores del modelo PER, implementado en el desarrollo de esta investigación se obtuvieron los resultados que a continuación se presentan:

#### Figura 4: Análisis de Desarrollo Sustentable, Factor Económico



#### Figura 5: Análisis de Desarrollo Sustentable, Factor Social

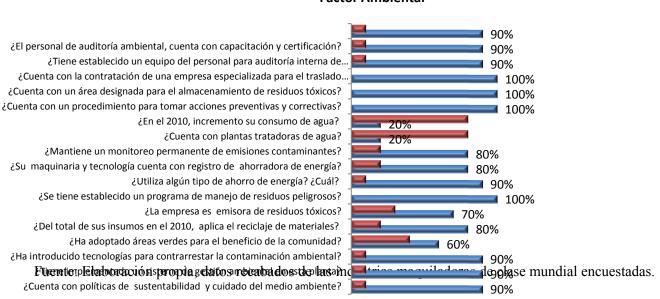


#### Análisis de Desarrollo Sustentable **Factor Social**

∎¿Fomenta el desarrollo de sus

- Se manejan políticas de respeto y valores entre los empleados?
- ∎¿Fomenta actividades culturales y deportivas entre los
- Ecuenta con un sistema interno de de seguridad y salud para los
- ■¿Cuenta con un equipo de seguridad e higiene industrial?
- ■¿Participa en el mejoramiento y calidad de vida para los

## Figura 6: Análisis de Desarrollo sustentable, Factor Ambiental



## Análisis de Desarrollo Sustentable Factor Ambiental

## CONCLUSIONES

Las conclusiones que arrojo esta investigación, de acuerdo a los factores que se evaluaron, se presentan a continuación:

#### Factor Económico

Los hallazgos presentan de manera contundente que las industrias de clase mundial, del sector electrónico cuentan con políticas y metas ambientales, vinculadas al desarrollo económico, bajo esquemas de aseguramiento de la calidad, con las certificaciones de ISO 14001, auditoría ambiental, establecidas por la Profepa y la introducción de tecnologías limpias para sus procesos productivos, del mismo modo fomentan el uso sustentable de los materiales y servicios.

#### Factor Social

Los hallazgos mostraron que las industrias de clase mundial, establecen políticas de valores, acordes con la misión y visión de las empresas, fomentan el desarrollo de los empleados, y su participación en la comunidad, generando un ambiente de bienestar laboral.

#### Factor Ambiental

Se concluye que el establecimiento de estas industrias del sector electrónico, son generadoras de contaminación y de residuos peligrosos, sin embargo los hallazgos también nos arrojan que estas industrias están preocupadas por el medio ambiente, manteniendo monitoreos y controles estrictos de sus materiales y desechos contaminantes, así como del retorno de los mismos al país de origen. Se encontró también que aplican medidas de reciclaje y de sistemas de tratamiento de aguas residuales, así como

políticas de sustentabilidad ambiental. Lo que coincide con los indicadores propuestos por esta investigación.

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# ANÁLISIS DE LA PRODUCCIÓN CIENTÍFICA DE UN CENTRO DE INVESTIGACIÓN EN MÉXICO.

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#### RESUMEN

El objetivo de este trabajo consiste en analizar la producción científica de revistas arbitradas, en un Centro de Investigación Científica y de Educación Superior de Ensenada Baja California (CICESE) de 1973 a 2011. El análisis se basa en el número de artículos por año del personal académico, por departamento, por investigador, además las revistas en las que publican y el idioma que utilizan de cuatro divisiones académicas que lo integran: Biología Experimental y Aplicada, Ciencias de la Tierra, Física Aplicada y Oceanología. Es un análisis cuantitativo, utilizando la herramienta de Microsoft Excel 2010. Esta información se obtuvo directamente de la base de datos de la productividad académica que se encuentra en el portal de Estudios de Posgrado del CICESE. Se reviso 3,148 artículos arbitrados, en 832 revistas donde publicaron.

PALABRAS CLAVE: Producción científica, artículos en revistas arbitradas y CICESE

#### SUMMARY

The aim of this paper is to analyze the scientific production of refereed journals, in a Center for Scientific Research and Higher Education of Ensenada (CICESE) from 1973 to 2011. The analysis is based on the number of articles per year of academic staff, by department, by investigator, and the journals that publish and language using four academic divisions that comprise: Experimental and Applied Biology, Earth Sciences, Applied Physics and Oceanography. It is a quantitative analysis, using the Microsoft Excel 2010. This information was obtained directly from the database of academic productivity found in the portal CICESE Graduate Studies. 3,148 refereed articles published in 832 journals where reviewed.

KEYWORDS: Production scientific, articles in refereed journals and CICESE

#### INTRODUCCIÓN

Uno de los 27 centros creado por decreto presidencial el 18 de septiembre de 1973 es el Centro de Investigación Científica y de Educación Superior de Ensenada ( en adelante CICESE) como parte del Sistema de Centros Públicos de Investigación del Consejo Nacional de Ciencia y Tecnología (CONACYT) para realizar investigación científica básica y aplicada, inicialmente en los campos de la geofísica, oceanografía física, física e instrumentación principalmente orientadas a la solución de problemas nacionales y en particular a los regionales de la península de Baja California, así como en las áreas de las actividades docentes, a nivel de maestría y doctorado. A continuación en la tabla 1 se presentan las 30 diferentes formas en que le ha llaman al Centro de Investigación Científica y de Educación Superior de Ensenada.

Tabla 1.- Formas de nombrar al CICESE, dentro de la base de datos de ISI Web of Knowledge.Centro de Investigación Científica y de Educación Superior de Ensenada Baja California

	Centro de Investigación Científica y de Educación Superior de Ensenada Baja California
1	CICESE
2	CTR INVEST CIENT EDUC SUPER ENSENADA
3	CICESE RESCTR
4	CTR INVEST CIENTIFICA EDUC SUPER ENSENADA
5	CTR INVEST CIENT EDUC SUPER
6	CTR INVEST CIENT ESTUDIOS SUPER ENSENADA
7	SCIRESADV STUDIES ENSENADA CICESE
8	CTRSCIRES HIGHER EDUC ENSENADA
9	CTRSCIRES HIGHER EDUC ENSENADA CICESE
10	SCIRESADV STUDIES CTR ENSENADA
11	CTR INVEST CIENT EDUCAC SUPER ENSENADA
12	CTR INVEST CIENT EDUC SUPER ENSENADA BC
13	CICESE BC
14	CICESE LA PAZ
15	CTR INVEST CIENT EDUC ENSENADA
16	CTR INVEST CIENT EDUC SUPER ENSENEDA
17	CTR INVEST CIENTIF EDUC SUPER
18	CTR INVEST CIENTIF EDUC SUPER ENSENADA BAJA CAL
19	MEXICAN SCIRESADV STUDIES CTR ENSENADA
20	CICESE CIENCIAS COMPUTAC
21	CICESE FIS APLICADA
22	CTR INVEST
23	CTR INVEST CIENTIF EDUCAC SUPER ENSENADA
24	CTR INVEST CIENTIF EDUCAC SUPR ENSENADA
25	CTR INVEST CIENTIF ESTUDIOS SUPER ENSENADA
26	CTR INVEST CIENTIFICA EDUCAC SUPER ENSENADA
27	CTR INVEST CIENTIFICIA EDUC SUPER ENSENADA

- 28 CTR INVEST CHEMINICIA EDOC SUPER ENSENADA
- 29 CTRSCI INVEST HIGHER EDUC ENSENADA
- 30 SCI RESADV STUDIES CTR ENSENADA CICESE

#### Objetivo general:

Analizar la producción científica de artículos arbitrados, del personal académico del CICESE en el periodo de 1973 a 2011, por autor, por año, por idioma y por revista.

#### Objetivos específicos:

Analizar el número de artículos por año que publica el personal académico, de las divisiones de Biología Experimental y Aplicada, Ciencias de la Tierra, Física Aplicada y Oceanología.

Determinar el número de artículos por investigador, de las divisiones de Biología Experimental y Aplicada, Ciencias de la Tierra, Física Aplicada y Oceanología.

Identificar las revistas en las que publican las divisiones de Biología Experimental y Aplicada, Ciencias de la Tierra, Física Aplicada y Oceanología.

Identificar el idioma en que publican las divisiones académicas de: Biología Experimental y Aplicada, Ciencias de la Tierra, Física Aplicada y Oceanología.

#### Objeto de estudio

Los artículos arbitrados que publicaron los investigadores de las cuatro divisiones del centro, Biología Experimental y Aplicada (DBEA), Ciencias de la Tierra (CT), Física Aplicada (FA) y Oceanología (OC).

## METODOLOGÍA

Es una investigación cuantitativa, descriptiva. El proceso para llevar a cabo esta investigación se obtuvo principalmente de la base de datos de la página de Estudios de Posgrado del CICESE, de allí se extrajeron los datos de las cuatro divisiones del centro, Biología Experimental y Aplicada (DBEA), Ciencias de la Tierra (CT), Física Aplicada (FA) y Oceanología (OC), para este estudio de caso se investigó la producción desde el inicio de cada división. Se capturaron 3,148 artículos,832 revistas en las que ellos publican. Para este trabajo de investigación se tomaron datos a partir de 5 artículos publicados por autor, y las revistas que tuvieron más de 5 artículos publicados por alguno de los investigadores del centro, esto con el fin de agilizar la selección y ordenar la producción por año, por investigador y por idioma.

# **OPINION DE EMPLEADORES**

Juan Cortes Botello, Universidad Autonoma de Baja California Gonzalo Llamas Bañuelos, Universidad Autonoma de Baja California

## RESUMEN

La globalización, la sociedad del conocimiento y de la información, así como los cambios científicotecnológicos han modificado sustancialmente el mundo laboral. Hoy en día la creación de riqueza depende de la aplicación del conocimiento especializado en el trabajo, lo cual coloca a las diferentes instituciones de educación en el reto de modificar sus estructuras, procesos y formas de organizar el trabajo académico en función de las necesidades que se derivan de ese nuevo ordenamiento de la producción laboral de los bienes y servicios y por ende del conocimiento.

Lo anterior plantea a las IES y a los egresados nuevas relaciones y formas de trabajo en el campo profesional, incluso a nivel de políticas públicas los gobiernos están impulsando reformas laborales que habrán de influenciar el quehacer de las instituciones educativas. Por ello se establece la exigencia de formar al egresado en un ámbito que le permita adquirir nuevas competencias, conocimientos, habilidades y actitudes, para integrarse y mantenerse en los mercados laborales imperantes y en los emergentes.

Ante estas demandas y exigencias, la educación universitaria adquiere gran importancia por el impacto que tiene al desarrollar la capacidad de la fuerza laboral, el nivel de productividad nacional y la competitividad internacional.

Por lo anterior es que los estudios de opinión de empleadores sobre el desempeño profesional de los egresados ofrecen información valiosa para apoyar la acreditación y la actualización permanente de los planes y programas de estudio de acuerdo a las necesidades de la sociedad y del mercado laboral. Por lo dicho anteriormente se presentan los resultados del estudio de "OPINION DE EMPLEADORES" de los egresados de las carreras de LA Facultad de Ciencias Administrativas de la UABC.

**PALABRAS CLAVE:** Globalización del Conocimiento, Modificación de Curriculum, Mercados Laborales, Estudio de empleadores, Colectividad competitiva y Velocidad e Intensidad de Innovación.

### INTRODUCCION

El sistema de educación superior mexicano se enfrenta a problemas como son, la demanda creciente de servicios por parte de la sociedad y a la crítica acerca de la falta de congruencia entre los procesos educativos, las necesidades sociales y las exigencias del mercado laboral. Estos problemas plantean a las IES y en particular a la FCA y a la UABC nuevas relaciones y formas de trabajo en el campo profesional. La información sobre estas nuevas exigencias constituye uno de los insumos más importantes de los estudios de empleadores para la UABC y la FCA, los empleadores se han convertido en los informantes calificados, capaces de identificar e informar sobre las necesidades de capacitación de los recursos humanos en función de las demandas del mercado de trabajo y del sector productivo.

A través de la opinión de los empleadores es posible detectar las necesidades en cuanto a conocimientos, habilidades, actitudes y valores que ellos requieren de los egresados en este sentido se toma al mercado de trabajo como un sistema de información.

A la fecha la mayoría de las instituciones de educación superior tanto públicas como privadas del país han realizado estudios de egresados y de empleadores, a partir de éstos, han logrado aproximarse y conocer el mundo laboral de sus egresados y el grado de satisfacción de la formación profesional recibida y sobre su desempeño profesional.

El contar con estudios de este tipo se ha convertido además en uno de los indicadores a evaluar por parte de organismos externos a las IES, como son los Comités de Pares y los organismos acreditadores, además se ha convertido también en un instrumento que incide en la obtención de recursos otorgados por el gobierno federal.

Es por lo anterior que la Facultad de Ciencias Administrativas de la Universidad Autónoma de Baja California realizo la investigación "OPINION DE EMPLEADORES" cuyo objetivo es conocer la evaluación que hacen las organizaciones respecto a los egresados de la FCA con el objetivo es asegurar y mejorar la calidad de los programas de estudio de licenciatura de la Facultad de Ciencias Administrativas de la UABC, para que esté acorde con las normas establecidas por los organismos acreditadores reconocidos por el Concejo para la Acreditación de la Educación Superior (COPAES), así mismo, para que la pertinencia de los programas formales, de educación continua y de vinculación se evalúen desde la perspectiva de los empleadores. El estudio comprendió a las carreras de Contabilidad, Negocios Internacionales, Administración de Empresas y de Informática.

#### JUSTIFICACION

Los cambios económicos, sociales, científicos, tecnológicos plantean a la exigencia de formar al egresado en un ámbito que le permita adquirir nuevas competencias, conocimientos, habilidades y actitudes, más amplias y globales, para integrarse y mantenerse en los actuales y futuros mercados laborales. Por lo anterior se reconoce la necesidad de realizar una investigación sobre la opinión que los empleadores tienen acerca de sus colaboradores formados académicamente en la Facultad de Ciencias Administrativas de la UABC y espera que los resultados de la investigación contribuyan a dar respuestas a algunas de las interrogantes institucionales, como son: ¿ Hacía dónde se dirige la construcción del conocimiento de las carreas objeto de este estudio?, ¿Cuáles son las tendencias y perspectivas futuras de las carreras que se ofertan en la FCA, desde el punto de vista del mercado laboral? y ¿Cómo construir e incorporar un currículum pertinente a las carreras de la FCA? . Con la dinámica tan cambiante de la sociedad, se obliga a las Instituciones de Educación Superior (IES) a estar en permanente observancia y alerta de la pertinencia en la calidad de la educación que imparten, así como de las carreras que ofertan para no verse desfasadas por los nuevos requerimientos de los sectores productivos y sociales, de su región, de su país y del ámbito externo el cual cada vez juega un papel más importante en la construcción de las diferentes políticas públicas de las naciones. Es por ello que estudios cómo el que nos ocupa deben constituirse en programas de investigación institucionales por parte de las IES, así como ya lo es de la UABC y de la FCA. Este tipo de estudios se constituyen arrojan información para la mejora y actualización permanente de los planes y programas de estudio, para la definición de políticas de desarrollo institucional en los niveles estatal, regional y nacional, para la ampliación de la oferta educativa, para conocer el desempeño de sus egresados y tener así una vía de aproximación a la realidad de los campos profesionales, para realizar ejercicios de reflexión y autoevaluación con la finalidad de redefinir el rumbo y visión institucional y, finalmente, lograr con esto una mayor vinculación y pertinencia social.

#### **OBJETIVO PRINCIPAL**

El objetivo principal que se planteo en esta investigación fue la de evaluar la correlación del perfil profesional del egresado de la FCA de acuerdo a las funciones, actividades y tareas que el ejercicio profesional les exige a los egresados de la FCA, así como también las habilidades y actitudes que poseen los egresados de la FCA en relación a lo que demanda el mercado de trabajo.

Para alcanzar el objetivo principal se definieron cuatro objetivos particulares:

Caracterizar las competencias profesionales del egresado de la FCA en función de la opinión de los empleadores;

Medir la satisfacción de los empleadores respecto al cumplimiento del desempeño profesional del egresado de la FCA;

Determinar la pertinencia del currículo con las necesidades de los empleadores e;

Identificar las competencias más demandadas del perfil del egresado de la FCA y aquellas que deben mejorarse según las exigencias del campo profesional.

Los objetivos específicos del estudio son:

- 1. Apoyar el diseño y revisión de planes y programas de estudio
- 2. Conocer el desempeño profesional del egresado
- 3. Consolidar la línea de investigación de empleadores.
- 4. Conocer las exigencias formativas que el empleador exige del egresado de la FCA.
- 5. Conocer la opinión de los empleadores sobre los criterios y valoraciones que utilizan en el proceso de selección y contratación de los egresados de nuestra Facultad.

#### METODOLOGÍA

Estudio fue descriptivo. Se analizaron las opiniones de 243 empleadores seleccionados aleatoriamente partir de los directorios empresariales de la ciudad de Mexicali.

Directorio de CANACO

Directorio de CANACINTRA

Directorio de la Industria de la Construcción, y

Directorio de la Industria de la Maquiladora.

#### Métodos y técnicas

La metodología empleada en el presente estudio incluyó el cuestionario "Opinión de Empleadores" el cuál fue diseñado por la ANUIES y la UABC, lo único que se hizo fue ajustarlo a las necesidades de la FCA.

El cuestionario consta de 26 preguntas y es de opción múltiple.

- Los pasos que se siguieron para realizar la investigación fueron:
- 2.1 Integración del directorio de empleadores
- 2.2 Identificación de la población.
- 2.3 Diseño del cuestionario
- 2.4 Elaboración de la muestra
- 2.5 Aplicación del cuestionario
- 2.6 Diseño de sistema de base de datos
- 2.7 Captura de datos
- 2.8 Interpretación y presentación de resultados en gráficas.

#### **DESCRIPCION DE RESULTADOS**

La encuesta fue respondida por mujeres (53.3%) y por hombres (46.7%).

La mayor parte de las empresas que contestaron la encuesta son del sector privado (92.6%). El giro económico que mayor participación tuvieron en la encuesta fue la de comercio, restaurantes y hoteles (34.9%). Por el tamaño de la empresa las que más participaron fueron las pequeñas (33.7%). Por origen o

procedencia del capital las empresas de mayor participación son las nacionales (74.1%). Las empresas que manifestaron la mayor frecuencia en relación a la cantidad de contadores que tenían dentro de ella, el (32.5%) manifestó tener un solo contador. La mayor parte de los contadores se encuentran laborando como personal de base (76.3%). El 22.2% de la empresas tienen sólo un Administrador de Empresas. El 87.6% de los LAES laboran como personal de base. De las empresas que manifestaron tener laborando a Lic. en Negocios Internacionales la frecuencia más alta se ubico en 15.7% de las que tenían únicamente al un LNI laborando. El 81.7% de los LNI laboran como personal de base. El 26.6% de las empresas que tienen como personal a los egresados de Lic. en Informática, sólo tienen un egresado de LI. El 69.7% de los LI se encuentran trabajando como personal de base. Respecto a las perspectivas de empleo para los egresados de la FCA la empresas en su mayoría manifestaron que se mantendrá igual: Contadores (64%); LAES (55.7%); LNI (57.4%) y LI (57.7%). El medio que más utilizan las empresas para contratar a los profesionistas es el de avisos a través de los medios de comunicación (44.2%). Al momento de seleccionar a su personal profesional las empresas consideran de mucha importancia el desempeño del egresado en la entrevista (69%); seguido por la buena presentación (58.6%) y por el dominio o nivel de conocimientos para el puesto que pretende ocupar (50.4%). Las empresas objeto de la investigación manifestaron en su mayoría tener preferencias para contratar a egresados de la UABC (83.8%). Lo que respecta a la evaluación al desempeño profesional del egresado las frecuencias más significativas se dieron de la siguiente manera: con el calificativo de buena; Contadores (51.2%); LAES (56.6%); LNI (49.6%) y LI (57%). La evaluación que le dan al nivel de responsabilidad del egresado en el caso de las cuatro carreras objeto del estudio las frecuencias más altas se ubicaron en el indicador de mucha responsabilidad. LAES (70.7%); LNI (69.3%); Contadores (67.5%) y LI (64.1%). Los egresados de las cuatro carreras fueron calificados con el indicador de mucho en la característica de habilidad para trabajar en equipo: LAES (64.7%); LI 57.2%); LNI (55.4%) y CP (52.5%). En lo que respecta a la capacidad de integrarse al medio laboral también fue el indicador de mucho el mejor evaluado para las cuatro carreras. LAES (57.5%); LNI (57.4%); CP (56%); v LI (49%).

En lo que se refiere a la evaluación sobre la disposición para el cambio las frecuencias más altas para el indicador de muchos la obtuvieron las carreras de LAES (54.5%) y LNI (52.5%). Las empresas consideraron que las carreras con mayor creatividad son: LAES (52.7%) y LNI (51.5%). Por lo que se refiere al pensamiento crítico y propositivo que ven en los egresados, todas las carreras sujetas al estudio tuvieron sus más altas frecuencias en el indicador de mucho. En cuanto a la actitud emprendedora los egresados obtuvieron las frecuencias mayores en el indicador de mucho. En lo referente a la capacidad de liderazgo de igual modo que en los casos anteriores las cuatro carreras tuvieron sus mayores frecuencias en el indicador de mucho. Las empresas consideran que hay mucha disciplina, honestidad, lealtad, y solidaridad en los egresados de la FCA. En lo referente a las habilidades y competencias que las organizaciones observan en los egresados de la FCA los resultados son los siguientes: Con el indicador de mucha habilidad administrativa fueron calificados en el siguiente orden de importancia los egresados de LAES: LNI v CP, en lo referente a la habilidad de comunicación las cuatro carreras tuvieron sus más altas frecuencias en el indicador de mucho; en la habilidad de manejo de grupos los egresados de LAES, LNI y CP son los que obtuvieron las frecuencias mayores en el indicador de mucho; en la habilidad de innovación los egresados mejor calificados son los LAES seguidos por los de LI y en tercer lugar los de LNI; en lo que respecta a la habilidad de organización y coordinación los que fueron calificados con el indicador de mucho fueron los LAES, CP y LI; respecto a la habilidad de planeación las cuatro carreras tienen su más altas frecuencias en el indicador de mucho; En la habilidad de capacidad de análisis las egresados mejor evaluados con el indicador de mucho son los de CP, LAES y LNI respectivamente; en cuanto a la habilidad de dirección solo los LAES tuvieron la frecuencia mayor en el indicador de muchos; respecto a la habilidad de supervisión los egresados que alcanzaron las calificaciones más altas en el indicador de mucho son en estricto orden de importancia los LAES, CP y LNI; En lo referente a la habilidad de generar y aplicar nuevos conocimientos los egresados de las cuatro carreras alcanzaron sus mayores frecuencias en el indicador de muchos, los LAES, LI, CP y LNI respectivamente; en la habilidad de manejo de herramientas informáticas los egresados de las carreras objeto del presente estudio fueron

calificados bajo el indicador de mucha habilidad en el siguiente orden LI, LNI, LAES y CP; en cuanto a la solución de problemas obtuvieron las más altas frecuencias en el indicador de mucho los egresados de LAES, LI, CP y LNI en estricto orden de importancia; y por último en la habilidad de dominar otros idiomas solo los egresados de LNI y CP fueron calificados con las frecuencias mayores en el indicador de mucho. En la capacitación de sus cuadros las empresas recurren más a la organización de cursos internos (47.6%). Los tópicos considerados más prioritarios en la actualización de sus cuadros son: administrativos (27.7%); el manejo de nuevas tecnologías (24.3%) y aspectos contables y fiscales (17.9%).

En lo que se refiere a la modalidad de capacitación que las empresas privilegian se tiene los siguientes resultados: curso-taller de fines de semana (25.9%); curso-taller entre semana (24.6%) y conferencias (22%). En cuanto a las características que la UABC y la FCA deben considerar al momento de preparar al estudiante se tiene lo siguiente: En el indicador de Mucho muy importante la característica más sobresaliente es la de preparar al estudiante para la competencia laboral (38.5%); bajo el indicador de muy importante la característica sobresaliente es la de preparar al estudiante para a estudiante para que tenga la aptitud de trabajar en equipo (22.3%); en el indicador de importante destaca la característica de aptitud para trabajar en equipo (22.3%) y en el indicador medianamente importante sobresale la misma característica que en los dos últimos indicadores . En cuanto a las características que la UABC y la FCA deben de considerar para enfrentar con éxito el futuro las recomendaciones son las siguientes:

Con el indicador de Mucho muy importante destaca la característica de impartir una educación de calidad (32.1%); en el indicador de Muy importante sobresale la misma anterior característica con un 25.4% y en el indicador Medianamente importante sobresale la recomendación de que la UABC y la FCA asuman un compromiso con el desarrollo regional y nacional (21.1%). En cuanto a los servicios que más solicitan a la UABC sobresalen dos la recepción de estudiantes para prácticas profesionales y para prestar servicio social, con el 45.1% y 42.1 respectivamente. La calificación que dan las empresas a los servicios que han solicitado a la UABC los consideran como buenos un 59.1% y como excelentes un 34.1%. Por último las áreas en que las organizaciones consideran que la UABC y la FCA deben ampliar y diversificar la cobertura de servicios destacan las siguientes: la elaboración y presentación de proyectos (22.4%) y participación de estudiantes en empresas (21.1%).

#### CONCLUSIONES

Los egresados de la FCA laboran en su mayoría como personal de base y las empresas consideran que para el 2012 mantendrán la misma cantidad de profesionistas de la contabilidad, de administradores, de negocios internacionales y de licenciados en informática. La modalidad de mayor uso por parte de las empresas para contratar al su personal son los avisos en los medios de comunicación. Los indicadores que mayor peso tienen en la contratación del personal son: el desenvolvimiento del egresado al momento de la entrevista, una buena presentación y el nivel de conocimiento que posee. Las empresas dan preferencia a los egresados de la UABC a la hora de la contratación. El desempeño laboral de los egresados de la FCA fue catalogado por la gran mayoría de las empresas como bueno. De acuerdo al apartado de actitudes y valores de los egresados de la FCA las organizaciones calificaron con el indicador de MUCHO los aspectos de responsabilidad en el trabajo, integración al medio laboral, pensamiento crítico y propositivo, actitud emprendedora, capacidad de liderazgo, disciplina, lealtad, honestidad, solidaridad, disposición para el cambio y creatividad. En lo referente a las habilidades en el desempeño profesional, de igual manera las empresas evaluaron muy bien a los egresados de la FCA con el indicador de MUCHO y de aceptable en las habilidades administrativas, de comunicación, de manejo de grupos, en innovación, organización y coordinación, planeación, análisis, dirección, supervisión, generación y aplicación de nuevos conocimientos, manejo de herramientas informáticas, solución de problemas y en el dominio de otros idiomas. La mayor parte de las empresas capacitan a sus trabajadores mediante cursos internos en la misma empresa, por otro lado consideran que la prioridad en la actualización debe ser en aspectos administrativos. Para llevar a cabo la capacitación las empresas prefieren los cursos de fines de semana.

Las recomendaciones que hacen las empresas para que tanto la UABC como la FCA preparen mejor a sus estudiantes consideran que se debe enfatizar en preparar al estudiante para competir laboralmente y para que asuma una aptitud para trabajar en equipo. En las recomendaciones que las empresas hacen a la UABC y a la FCA para enfrentar con éxito el futuro destaca la siguiente: impartir una educación de calidad. Por último en el aspecto de la vinculación se nota que la UABC y la FCA participan mayormente en la modalidad de estudiantes en prácticas profesionales y estudiantes en servicio social, por lo que en las otras modalidades de vinculación se participa muy poco.

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### RESUMEN

Uno de los principales desafíos que enfrentan las universidades en la actualidad, es la necesidad de contar con más espacios para la gran cantidad de jóvenes que egresan del nivel medio superior que les permita alcanzar a nivel nacional, el 30% de la matrícula como se lo han propuesto. Asimismo, lo anterior va de la mano con el importante reto de ofrecer licenciaturas e ingenierías acordes a las necesidades productivas del país, así como a las expectativas personales de los alumnos, que les permitan incorporarse rápidamente al mercado de trabajo y que al mismo tiempo, les otorguen conocimientos actualizados y rápidamente aplicables. En ese marco, el presente trabajo busca en buena medida tratar de determinar, con base a la percepción de los egresados de la Facultad de Ciencias Administrativas (FCA), si los conocimientos obtenidos por los estudiantes en su paso por la universidad les han representado una ventaja en el mercado laboral y al mismo tiempo, si esto les ha implicado una mejora en sus condiciones laborales, ya sea en términos salariales y posiciones al interior de las empresas. En general, los datos revisados en este breve trabajo documentan que los estudiantes a pesar de haber aprendido una cantidad importante de elementos teóricos durante el transcurso de su carrera, están bastante satisfechos con su paso por la universidad.

PALABRAS CLAVES: Mercado Laboral, seguimiento de egresados, empleabilidad y conocimientos académicos

### INTRODUCCION

Desde hace varios años se ha venido fortaleciendo a nivel internacional la tendencia de evaluación de la actividad universitaria, como una forma de rendición de cuentas a la sociedad y a los gobiernos. En ese contexto de evaluación, el seguimiento de egresados es un asunto de vital importancia para las universidades, ya que el desempeño profesional y personal de los egresados permite establecer indicadores con respecto a la calidad y eficiencia de las instituciones de educación superior. Sin embargo, no todas las universidades cuentan con programas sistemáticos de seguimiento de egresados. Hoy en día, las instituciones de educación superior deben analizar minuciosamente la inserción de los egresados en el mercado laboral para mejorar su oferta de enseñanza y formación. Las condiciones económicas fundamentales han cambiado radicalmente, y los esquemas de organización laboral exigen la existencia de un enlace más sólido entre las habilidades formativas y profesionales.

Una de las principales tareas de las universidades en México, está dada por la provisión de educación superior de calidad, acorde a las necesidades de los propios estudiantes, del mercado de trabajo y de la sociedad en general. En ese sentido, esta educación de calidad en buena medida puede vislumbrarse a través de la percepción con la que cuentan los usuarios del servicio respecto a la educación recibida.

Así pues, en la actualidad es de vital importancia la revisión permanente de los planes y programas de estudios, en virtud del entorno tan cambiante que incide de forma importante en las instituciones de educación superior a nivel mundial. Es aquí, donde la revisión de los planes y programas de estudio se justifica ampliamente para evitar la obsolescencia de los conocimientos que se imparten en las aulas y por ello, se ha venido trabajando en la revisión sistemática de las necesidades que han sido señaladas por los egresados.

Por otro lado, la estructura del mercado laboral es una instancia que ha sido afectada de manera profunda por la globalización económica y por el desarrollo de las tecnologías de la información y la comunicación (TICS), de tal manera que como institución educativa, la UABC requiere de hacer acopio de todos esos conocimientos, actitudes, habilidades y destrezas que está demandando el mercado laboral.

El breve trabajo que aquí se presenta pretende recoger las opiniones de los egresados en términos del empleo actual que desarrollan, así como las razones que influyeron en los empleadores para otorgarles un puesto de trabajo. En general se pretende conocer el entorno laboral en el cual se desenvuelven actualmente así como su grado de satisfacción con los servicios recibidos por la Facultad de Ciencias Administrativas (FCA), el contenido de las asignaturas cursadas y su grado de aplicación en el trabajo. También se rescatan algunas opiniones de los egresados sobre su formación recibida, su opinión sobre la institución, la organización académica y el desempeño institucional, además del grado de satisfacción con la UABC y con la carrera cursada.

#### MARCO REFERENCIAL.

En la actualidad, las universidades necesitan asegurar capacidades y servicios profesionales que no terminen con la obtención de un título sino que tomen también en cuenta la necesidad del aprendizaje permanente. Los últimos años han indicado que existen tres tendencias principales que afectan a los requisitos exigidos a los empleados altamente calificados. La primera es la necesidad de estar cada vez mejor educados y capacitados, un factor que muchos consideran el impulsor clave del crecimiento económico global. La segunda tendencia se relaciona con el término "la sociedad de la información"(1), que fue ideado no sólo para reconocer el alcance cada vez mayor de la tecnología avanzada y los sectores con un alto nivel de conocimientos en la economía, sino también destaca que la organización laboral está cambiando como consecuencia de la creciente importancia de los conocimientos. La tercera tendencia consiste en los cambios permanentes del mercado laboral.

El término mercado laboral transitorio indica la tendencia de la sociedad moderna de desdibujar los límites entre el trabajo, el tiempo libre, la educación y la asistencia. Esto ha generado una mayor movilidad y flexibilidad (2). Las trayectorias profesionales de la vida y del trabajo ya no son estandarizadas, y como resultado, la "empleabilidad" ha llegado a ser un tema clave. Resulta que los grupos de interés de la universidad, la educación superior, la formación vocacional y el mercado laboral tienen una necesidad vital de la documentación apropiada para evaluar el escenario cambiante, sobre todo en el área de la inserción al mercado laboral de los recién egresados.

El periodo de transición entre la universidad y el empleo es reconocido como crucial para el futuro desarrollo profesional. En los últimos años, las universidades e instituciones de educación superior en todo el mundo han empezado a enfocarse en el aseguramiento de calidad para satisfacer las necesidades tanto de sus estudiantes como de la sociedad con respecto al mercado laboral. Por lo tanto, el conocimiento bien establecido de las fuerzas y las debilidades de sus programas de estudio es esencial para la gestión de la calidad. Al mismo tiempo, se exige cada vez más a las instituciones de educación superior que se responsabilicen de su trabajo. Por consiguiente, se mide el éxito de las universidades basado principalmente en el resultado de sus estudiantes con respecto a su situación laboral y su compromiso social. En ese marco, los estudios de seguimiento de egresados constituyen una manera de realizar esta medición.

Las concepciones teóricas que fundamentan el trabajo de los egresados de cualquier institución de educación superior en el país, aluden a teorías que son producto de estudios perfilados en diversas perspectivas. La Teoría del Capital Humano, ("Capital formation by education": Jour. Pol. Econ. No. 68, 1960) por ejemplo, sentó las bases para el estudio económico sobre egresados. Este paradigma se inscribe en el campo de las relaciones entre el mundo de la educación y el mundo del trabajo. Relaciones muy

complejas, que ha producido un vasto cuerpo teórico en el que se han fundamentado las ciencias de la Educación. Es importante destacar que esta teoría tiene limitaciones para explicar el conjunto de relaciones entre educación y trabajo; y, asimismo, es importante reconocer la contribución de perspectivas emergentes que buscan cubrir dicha insuficiencia explicativa.

Estos nuevos enfoques proporcionan una explicación diferente acerca del papel que juega la educación en la ocupación y el ingreso. En resumen, la principal aportación de las llamadas interpretaciones emergentes, (Carnoy, Paris. 1977) tales como las teorías de la fila, (Lyons) de la devaluación de los certificados (Dore, London, 1976) y del bien posicional, (Izquierdo, 1992) es que pueden ayudar a explicar el cuadro de relaciones entre educación e ingresos a partir de la estratificación de clases, de sexo y de razas. Asimismo, se incluye en este conjunto de explicaciones emergentes, la idea de que la institución escolar de la que proceden los profesionistas es una variable importante para la incorporación de éstos en el mundo del trabajo, (Pesacador, 1984) desde la perspectiva de los empleadores, esto se convierte en un proceso de "señalización" institucional. Por lo que corresponde a movilidad social, (Boudon, 1984) ésta ha sido concebida como el hecho de que los individuos adquieran en la sociedad, posiciones diferentes de aquéllas de su familia de origen, por lo que fundamentalmente se busca comparar la ocupación de los hijos con la de sus padres, aunque en algunos estudios intervienen también variables tales como los niveles de apertura relativa en las estructuras educativa y ocupacional, así como el estatus atribuido a las ocupaciones según sus contextos culturales.

#### METODOLOGIA

El procedimiento que se siguió para localizar a los egresados de las distintas carreras fue a través de un padrón de egresados que tiene la Facultad de Ciencias Administrativas. El contacto se realizo vía correo electrónico, por teléfono y una gran mayoría en los centros de trabajo. Una vez localizados se procedió a aplicarles la encuesta y posteriormente, los cuestionarios se concentraron y se revisaron de forma individual para determinar si estaban debidamente contestados.

Una vez aplicados los instrumentos, se digitalizó y sistematizó la información de los mismos. Cabe destacar que se capturaron 343 encuestas correspondientes a estudiantes egresados de los programas de las licenciaturas en Contaduría Publica, Administración de Empresas, Informática y Negocios Internacionales. El siguiente paso fue obtener la distribución de frecuencias de cada una de las variables contenidas en el instrumento.

El instrumento fue diseñado para capturar la información precisa objeto de este estudio e incluyó un total de 46 preguntas distribuidas en las siguientes temáticas: i) Aspectos socio demográficos; ii) Formación Académica; iii) Trayectoria y ubicación en el mercado laboral; iv) Desempeño profesional; v) Opinión sobre formación profesional; vi) Opinión sobre la formación recibida; vii) Recomendaciones para mejorar el perfil de formación profesional; viii) Opinión sobre la institución; ix) Opinión sobre la organización académica y desempeño institucional; x) Opinión sobre la organización institucional; xi) Satisfacción con la UABC y la carrera cursada

Por otro lado, cabe destacar que los sujetos encuestados fueron los egresados de las licenciaturas en Contaduría, Administración de Empresas, Negocios Internacionales e Informática, de las generaciones que abarcan el periodo 2000 al 2011.

AÑO	C.P.	L.A.E	L.I	L.N.I
2000	189	88	71	0
2001	122	108	108	50
2002	160	167	34	75
2003	134	175	46	106
2004	129	162	59	60
2005	160	175	56	34
2006	148	110	52	89
2007	153	216	47	64
2008	221	262	70	74

Serie Estadistica De Egresados Del 2000 Al 2011

Fuente: Coordinacion De Bienestar Estudiantil y Escolares UABC

#### **RESULTADOS**

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TOTALES

No hay duda que las opiniones de los egresados son de vital importancia para la reestructuración de planes y programas de estudios; cabe destacar que, aun cuando estas opiniones sean parciales, son importantes ya que como complemento se requeriría la opinión de expertos docentes y por supuesto la opinión de los empleadores. Así pues, de acuerdo a los datos del análisis, se encuentra que el 46.7% de los egresados opina que buena parte de sus horas de clase, estuvieron dominadas por la formación teórica. En tanto que el 53.7% expresa que se le dio medio énfasis a la enseñanza metodológica. El 48.2% documenta un énfasis medio a la enseñanza de las matemáticas y estadística. La opinión sobre la enseñanza de técnicas fue con un énfasis medio de acuerdo con el 45.4% de las entrevistados, mientras que para el 43.9% la formación en prácticas de laboratorio, trabajo de campo y talleres fue con medio énfasis.

Cabe destacar que el análisis previo no discrimina por carrera, es decir, los valores de la gráfica hacen referencia a las respuestas de los 343 estudiantes entrevistados, sin distinguir en si estos son administradores o contadores, por ejemplo. Con esto queremos decir, que existe la posibilidad de que los estudiantes de la carrera de Informática Administrativa puedan haber recibido una mayor enseñanza de matemáticas y estadística, así como prácticas de laboratorio, de campo y talleres, comparados con los alumnos de Administración o Negocios Internacionales.

La gráfica siguiente, muestra el grado de satisfacción de los estudiantes en varios indicadores. Así por ejemplo, el 85.1% de los egresados se encuentran satisfechos con la aplicación de los conocimientos adquiridos en la licenciatura, mientras que el 81.7% se encuentra satisfecho con la posibilidad de realizar ideas propias en su centro de trabajo. En el mismo tenor, un 83.2% está satisfecho con el reconocimiento profesional que han alcanzado y la posibilidad de trabajar y coordinar equipos de trabajo.

Otro de los aspectos evaluados está dado por la posibilidad de responder a problemas que se presentan en el lugar de trabajo, y se documenta con un 86.8%. Este es quizás el punto crucial de un profesionista que es contratado para dar respuesta inmediata a problemas detectados. El 85% se encuentra también satisfecho con el trabajo que desarrolla y además se siente satisfecho con el ambiente laboral que prevalece en la organización. Con respecto al salario el 79.7% se encuentra satisfecho, y también respecto a la forma de responder a problemas de relevancia social y de sentirse también útil y aportar con algo de provecho para la sociedad. En general se puede observar la existencia de un alto grado de satisfacción con los aspectos evaluados que van desde su estado de ánimo, actitud personal y sus percepciones económicas.

Ahora bien, tratando de analizar la importancia de la carrera escogida desde la perspectiva del estudiante, en la gráfica siguiente se observa que en buena medida uno de los factores que más ha influido en la obtención de un empleo para los egresados, está dada por la coincidencia de la licenciatura con las necesidades de la empresa y del mercado. Habría que agregar además, el reconocimiento de la comunidad local respecto al prestigio de la institución, sin dejar de lado, la variable de experiencia previa de los egresados.

Uno de los elementos interesantes en la gráfica previa, está dado por el hecho de que se a los estudiantes universitarios se les hace hincapié en la obtención de calificaciones elevadas, así como la adquisición de habilidades en un segundo, e incluso en un tercer, idioma. Sin embargo, de acuerdo a los valores obtenidos del cuestionario, se observa que en base a las respuestas de los alumnos egresados el dominio de otros idiomas no es tan relevante (5.2%), lo mismo sucede con el promedio de calificaciones (3.9%).

Debido al proceso de crisis económica reciente, se observa a nivel mundial y nacional, una tendencia a elevadas tasas de desempleo, tasas que son incluso mayores para la población joven. En ese sentido, la educación debería aportar elementos de capacitación para que los desempleados adquieran nuevos conocimientos una vez que la economía regrese al rumbo de crecimiento y que los egresados, obtengan elementos acordes a lo que demanda el mercado laboral. En ese sentido, de los estudiantes encuestados que se encuentran laborando, en el 80.1% de los casos se manifiesta que existe coincidencia entre su actividad laboral y los estudios realizados en la universidad, es decir, se observa la presencia de congruencia entre las asignaturas cursadas y el ejercicio profesional. Son muy pocas las personas que manifestaron una nula coincidencia entre lo que estudiaron y su actividad actual como se observa en el gráfico siguiente; esto entonces, demuestra la necesidad de seguir mejorando los planes y programas de estudio, acordes a las necesidades del mercado y a las nuevas tendencias económicas.

e, en lo que respecta a la percepción de los egresados respecto a la calidad educativa institución, la respuesta es bastante positiva, ya que la mayoría de los entrevistados la considera alta y muy alta; si estos dos valores se agregan, se alcanza un 90.6% de opiniones favorables de la UABC. Aunado a esta percepción existen indicadores de calidad objetivos que la colocan como una de las mejores instituciones públicas a nivel regional y nacional.

Un rasgo característico en la Facultad de Ciencias Administrativas, es el hecho de que la mayoría de los estudiantes son mujeres, quienes a su vez obtienen los mejores promedios y se hacen acreedores al merito escolar que cada semestre se otorga a los estudiantes mas sobresalientes de las distintas carreras que ofrece esta unidad académica. Asimismo, aproximadamente dos terceras partes de los estudiantes son solteros, con un promedio de edad de 28 años y una mínima de 22 y una máxima de 60. Dos terceras partes de estos egresados tenían empleo antes de concluir sus estudios profesionales, lo que en buena medida documenta que las carreras del área de ciencias administrativas tiene una inserción laboral importante. Para los que no tenían empleo cuando concluyeron sus estudios, les llevo menos de seis meses en conseguirlo, y el periodo de tiempo entre el egreso de la licenciatura y el estar empleado es el resultado, además de la fragilidad del mercado de trabajo, de la falta de experiencia.

El medio a través del cual se enteraron de una vacante fue el periódico y las bolsas de trabajo. Actualmente un porcentaje de alrededor del 80% tiene trabajo como empleado y es mínimo el porcentaje de egresados que es propietario de algún negocio. Los puestos que desempeñan van desde directores generales, empleados profesionales, supervisores, analistas especializados hasta gerentes de área. En su mayoría tienen una contratación por tiempo indeterminado con lo cual se deduce que son personas que trabajan de tiempo completo en alguna organización privada o pública y son muy pocos los que son empleados por obra determinada.

Un alto porcentaje de los egresados trabajan en el sector privado y son mínimos los casos de ex alumnos que laboran en el sector público; las actividades que realizan tienen mediana coincidencia con lo que estudiaron y son muy pocos casos en los cuales el perfil de egreso coincide con su trabajo actual. Esto puede deberse a la crisis que estamos padeciendo y ante la carencia de empleos bien remunerados, por lo que es bastante probable que se inserten en el mercado laboral aun cuando las funciones que desempeñan en los trabajos no correspondan al perfil de egreso. Las actividades específicas que desarrollan son coordinaciones, actividades de administración, atención a clientes y ventas dentro de lo más destacado.

En su mayoría los egresados han tenido de 2 a 3 empleos -y en algunos casos hasta 4-, antes de terminar su carrera, lo que les ha permitido mejorar su nivel de ingresos una vez que han finalizados sus estudios. Una razón importante por la cual no trabajan actualmente es porque no han encontrado empleo y siguen buscando, otra porque están a punto de incorporarse a un empleo y otra, porque decidieron seguir estudiando.

La posición jerárquica que actualmente ocupan, los mantienen satisfechos y se encuentran también ante la posibilidad de responder a problemas de relevancia social y de hacer algo de provecho para la sociedad. La formación recibida lo ha estimulado para estar informado mediante la lectura de medios escritos y manifiesta que su formación en parte, ha contribuido a ser más participativo en asuntos de interés público y que lo ha motivado para promover iniciativas benéficas para la colectividad.

Las recomendaciones que hacen los egresados para mejorar el plan de estudios son entre otras cosas, que los contenidos teóricos se mantengan igual e inclusive que se amplíen, así mismo que los contenidos metodológicos y los contenidos técnicos se amplíen y que se deben extender los contenidos profesionales así como la enseñanza de las matemáticas y la estadística.

El sentido de pertenencia es muy alto de tal forma que está dispuesto a aconsejar y recomendar a un familiar o amigo para que estudie en la UABC, por el reconocimiento social regional y nacional que tiene la institución. Los egresados hacen una evaluación de los docentes manifestando que tenían un amplio conocimiento de la materia, que eran claras sus exposiciones y que la atención fuera de clase era buena, además de claridad en los enfoques teóricos meteorológicos, así como objetividad en la evolución de los trabajos escritos y exámenes.

Lo anterior, representaron características necesarias para motivar y ascender a nuevos conocimientos ya que esto les permitía a ellos motivarse para participar en clase. Al realizar una evaluación sobre la organización académica y el desempeño institucional, argumentan como bastante adecuados los cursos y seminarios, así como un estimulo al trabajo entre profesor y alumno. La orientación y conducción de los trabajos por parte de los docentes es buena, así como la atención recibida por parte del mismo.

#### CONCLUSIONES

Un rasgo característico en la facultad es que la mayoría de los estudiantes son mujeres, quienes obtienen los mejores promedios y se hacen acreedores al merito escolar que cada semestre se otorga a los estudiantes mas sobresalientes de las distintas carreras que ofrece esta unidad académica.

Aproximadamente dos terceras partes de los estudiantes son solteros, con un promedio de edad de 28 años y una mínima de 22 y una máxima de 60. Dos terceras partes de estos egresados tenían empleo antes de concluir sus estudios profesionales. Esto demuestra que las carreras del área de las ciencias administrativas tiene una inserción laboral importante, ya que mucho antes de concluir su carrera ya tienen empleo. Para los que no tenían empleo cuando concluyeron sus estudios les llevo menos de seis meses en conseguirlo. Y una razón por la cual no eran contratados es la falta de experiencia.

Las recomendaciones que hacen los egresados para mejorar el plan de estudios son: Que los contenidos teóricos se mantengan igual e inclusive que se amplíen, así mismo que los contenidos metodológicos y los contenidos técnicos se amplíen y que se deben ampliar los contenidos profesionales así como la enseñanza de las matemáticas y la estadística. La percepción que tienen los egresados sobre la calidad de la UABC varía de alta a muy alta y los porcentajes de no aprobación de este concepto son muy bajos.

El sentido de pertenencia es muy alto de tal forma que esta dispuesto a aconsejara y recomendar a un pariente o amigo para que estudie en la UABC, por el reconocimiento social regional y nacional que tiene la institución. Los egresados hacen una evaluación de los docentes manifestando que tenían un amplio conocimiento de la materia, que eran claras sus exposiciones y que la tensión fuera de clase era buena, que existía claridad en los enfoques teóricos meteorológicos, así como objetividad en la evolución de los trabajos escritos y exámenes.

#### RECOMENDACIONES

Realizar una campaña permanente en los centros de trabajo en donde laboran los egresados a fin invitarlos a titularse y que aprovechen las distintas opciones que existen para ello para que cumplan con ese requisito.

Fortalecer la bolsa de trabajo hacia las instancias correspondientes que requieran estudiantes y egresados para trabajar ya sea en el sector público o privado de la región.

Elaborar un programa de difusión interna para que los estudiantes y egresados se enteren de las ofertas de empleo que requiere el mercado de trabajo de la localidad.

Colocar a estudiantes y egresados de acuerdo con los perfiles en centros de trabajo en donde apliquen al 100% los conocimientos adquiridos en las aulas universitarias, para que haya congruencia entre el plan de estudios y la práctica profesional.

Incrementar la practica de algunas asignaturas dependiendo de la naturaleza de las mismas Agilizar los trámites administrativos para evitar demoras en estudiantes y egresados que disponen de tiempo limitado.

Abrir programas semi escolarizados y ofrecer programas de licenciatura y posgrados en línea (virtuales) para satisfacer la demanda de muchas personas que no cuentan con el tiempo necesario para asistir a un programa formal.

Agilizar el proceso de titulación y que haya talleres de orientación acerca de los tramites que deben realizar

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#### Index of Authors

Acosta de los Santos, Oscar
Acosta Espinoza, Patricia 1096
Acosta, Jorge 1234
Agudelo Orrego, Beatriz Eugenia 1277
Aguilera Enríquez, Luis
Aguirre y Hernández, Fernando 1046
Ahumada Toscano, Marcela Patricia
Akhtar, Pervaiz
Akter, Shahnag
Alam, Khan Muhammad Saqiful
Alcázar-Zamacona, José Pablo
Almada Urías, Rosalía Altagracia
Alonso Iglesias, Julio
Alsemgeest, Liezel
Alvarez Flores, Lorena
Anaya Rosas, Ricardo Ernesto
Antip, Adrian
Antipova, Tatiana
Araiza Garza, Zóchitl
Arechavala Vargas, Ricardo
Arenas Mozqueda, Norma Lorena
Arias Uribe, Myriam
Armenteros Acosta, María del Carmen 706, 761, 1165
Arnold, Liz Washington 42, 59, 87, 121, 130
Arreola Rodarte, Reyna Beatriz
Avilés Becerril, Elizabeth 1418
Balamaci, Dan
Baltar, Fabiola 322, 556
Bapat, Dhananjay 417
Barocio Torres, Ana Isabel
Barquero Cabrero, José Daniel 1165
Becerra Arenas, José Francisco 1073
Bernardo Huerta, Gabriela964
Bhattacharya, Arabinda201
Bhattacharya, Arabinda201 Bojórquez Zapata, Martha Isabel816
Bhattacharya, Arabinda
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722Calabria Malamut, Yasmin Elena1002
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722Calabria Malamut, Yasmin Elena1002Calderón Gutiérrez, Argelia195
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722Calabria Malamut, Yasmin Elena1002Calderón Gutiérrez, Argelia195Canibe Cruz, Francisco742
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722Calabria Malamut, Yasmin Elena1002Calderón Gutiérrez, Argelia195Canibe Cruz, Francisco742Cano-Olivos, Patricia223
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722Calabria Malamut, Yasmin Elena1002Calderón Gutiérrez, Argelia195Canibe Cruz, Francisco742Cano-Olivos, Patricia223Cantú Ballesteros, Lorenia1073, 1096
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722Calabria Malamut, Yasmin Elena1002Calderón Gutiérrez, Argelia195Canibe Cruz, Francisco742Cano-Olivos, Patricia223Cantú Ballesteros, Lorenia1073, 1096Caplanova, Anetta253
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722Calabria Malamut, Yasmin Elena1002Calderón Gutiérrez, Argelia195Canibe Cruz, Francisco742Cano-Olivos, Patricia223Cantú Ballesteros, Lorenia1073, 1096Caplanova, Anetta253Cárdenas Valenzuela, Alberto1003
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722Calabria Malamut, Yasmin Elena1002Calderón Gutiérrez, Argelia195Canibe Cruz, Francisco742Cano-Olivos, Patricia223Cantú Ballesteros, Lorenia1073, 1096Caplanova, Anetta253Cárdenas Valenzuela, Alberto1003Carranza Prieto, Rafael Ernesto997
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722Calabria Malamut, Yasmin Elena1002Calderón Gutiérrez, Argelia195Canibe Cruz, Francisco742Cano-Olivos, Patricia223Cantú Ballesteros, Lorenia1073, 1096Caplanova, Anetta253Cárdenas Valenzuela, Alberto1003Carranza Prieto, Rafael Ernesto997Carreño Dueñas, José Alexander1325
Bhattacharya, Arabinda201Bojórquez Zapata, Martha Isabel816Bova, Christina373Braidfoot, Randy378Bravo Zanoguera, Loreto María659, 675, 730Bribiescas Silva, Francisco986Burguete García, Mario Antonio871Buss, W. Christian236Bustamante López, Alonso1205Bustamante Ruiz, Ma Guadalupe610Bustamante Valenzuela, Ana Cecilia675Bustamante Valenzuela, Gilberto Enrique722Calabria Malamut, Yasmin Elena1002Calderón Gutiérrez, Argelia195Canibe Cruz, Francisco742Cano-Olivos, Patricia223Cantú Ballesteros, Lorenia1073, 1096Caplanova, Anetta253Cárdenas Valenzuela, Alberto1003Carranza Prieto, Rafael Ernesto997

Casas Medina, Emma Vanessa	
Castro García, Yenisey	
Castro Sánchez, Francisco Javier	1359
Cática Barbosa, José Rodrigo	1101
Cavazos-Arroyo, Judith	. 926
Chan Magaña, Mario Rene	
Chan Magaña, Mario René	
Chávez Álvarez, Lourdes Leticia	
Chávez Chávez, Santiago	
Chávez Escobedo, Juan Manuel	
Chávez Rangel, Maricela	
Chavez Rangel, Maricela	
Chen, Mingsiang	
Chew, Lynsie	
Chowdhury, Abdul Hannan	
Chowdhury, Shah Saeed Hassan	
Conde Islas, Alicia Águeda	1046
Corona Domínguez, Michele Alexandra	
Corona, Ramon	. 312
Corral Quintero, Esther Eduviges	, 730
Cortes Botello, Juan 1421,	
Corzo Santamaría, M. Teresa	
Cruz Chávez, Plácido Roberto585, 696	, 714
Cuéllar Fernández, Beatriz	. 772
De Coulon, Sonia	. 322
de la Garza Cienfuegos, Sandra Patricia 1023,	1141
de la Garza Martínez, Edna Isabel	1116
Deaconu, Alecxandrina	
DeDominicis, Benedict E	. 183
Delgado, Jaime	
Domínguez Ríos, Maria del Carmen	1390
Drira, Mohamed512	
Duque, Alejandro	1338
Elizalde Ceballos, Salomón	
Elkanj, Nasser	
Enríquez Pérez, Esther	1003
Escalante May, Nery del Socorro	
Escamilla Centeno, Verónica Guadalupe 861	964
Escobedo-Portillo, María Teresa	
Escorcia Caballero, Rolando	1030
Espinoza Torres, Rafael	855
Espíritu Olmos, Roberto	503
Estupiñan Pérez, Karen Yuridia	
Figueroa González, Ernesto Geovani	
Figueroa Villanueva, Adelaida	
Fireworker, Robert	
Flores Ortiz, Maria Virginia	1202
Fontalvo Herrera, Tomás José	1302
Fraire Ortiz, Ana Karen	
Fraire Zamarripa, Rosa Nelly	
Fuentes Callén, Yolanda	
Funmilayo, Amao	
Galadari, Abdulla	
Galán López, Arcely	1180
Gaona Tamez, Laura Leticia 1023,	
García Ramírez, María Magdalena	
García Ríos, Zoila Margarita	1403

García Rivera, Blanca Rosa 1350
García-Rivera, Blanca Rosa
Garnevska, Elena
Gentile, Natacha
Gómez Aguirre, Mario
Gómez Bañuelos, Denisse
Gómez González, Martha Sheila
Gómez Gutiérrez, Elizabeth Lourdes
Gómez Jiménez, Suzel
González Adame, Martha 1011
González Barajas, María Teresa
González Camargo, Carlos Alberto
González Herrera, María Brenda
González Martínez, Lizeth Alejandra 1065
González Núñez, Raúl 1156
González Peyro, Rosa Carmín 1083
González Rosas, Mónica Karina
González Velásquez, Santiago
Goussak, Gregory W
Grudinschi, Daniela
Guerrero Ramos, Liliana Angélica
Guillén Jiménez, Ana Ma
Gutiérrez Broncano, Santiago
Gutiérrez Moreno, Patricia
Guzmán Bedolla, Fabricio
Guzmán Vargas, Oscar 1265
Hallikas, Jukka
Haro-Zea, Karla Liliana
Harris, Peter 42, 59, 73, 87, 121, 130, 399
Henry, Stephen C
Hermosillo Anduaga, Gustavo César
Hernández Bonilla, Alicia
Hernández Castorena, Octavio 1011
Hernández Castro, Nidia Estela 1116
Hernández Ruíz, Lorena
Hernández Sandoval, Rosa Hilda 1141
Hernández Silva, Virginia 1381
Hernández Trejo, Lorena 1340
Holland, Joe
Ibarra Estrada, María Esther 1409
Ibarra Morales, Luis Enrique 1089
Inda, Alma Delia 1368
Indukoori, S S N Raju
Islam, Md Mohibul473
Ismail, Zamani435
Izak, Vratislav
Jaramillo Rosales, Martín742
Jarnecic, Elvis
Jiménez Torres, Ángela María 1292
Juárez Mancilla, Judith 585, 696, 714
Kalaluhi, Stephen
Kaljunen, Leena103
Kelilume, Ikechukwu
Kim, Sunghwan
Kinkela, Katherine
Kıran, Elif
Kundu, Amit
Lagoa Varela, M <sup>a</sup> Dolores
Lara Serna, Leonel
Lauterio Martínez, Claudia
Lee, Yurim

Lerma Cruz, Carmen Elisa950
Lin, Li-Hua
Lin, Szu-Hsien
Linton, Sara117
Liu, Yubo
Livingston, Lynda S 54
Llamas Bañuelos, Gonzalo 1421, 1427
López Chavarría, Sandra742
López García, Martin Miguel955
López García, Mónica Marsela976
López Montoya, Oscar Hernán 1101
López Torres, Virginia Guadalupe 791, 807, 1256
Lozano Ramírez, Maricruz 1350
Lozano Uvario, Katia544
Lu, Li
Lu, Wei218
Lucian, Paul
Madrigal Torres, Berta Ermila544
Madrigal Torres, Rosalba544
Maldonado Guzmán, Gonzalo 1135
Maldonado Radillo, Sonia Elizabeth 1350
Maldonado-Radillo, Sonia Elizabeth 997, 1200, 1418
Mariscal Lagarda, Martin 1062
Marr, Norman 95
Martínez Cabrera, Homero 1165
Martínez González, Lorenzo Omar 1380
Martínez Hernández, Fátima 1003
Martínez Macías, Juan Guadalupe 1397
Martínez Méndez, Rafaela 321, 1188
Martínez Puebla, Jesús Apolinar 600
Martinez-Flores, José Luis
Martínez-Flores, José Luis 354
Martot, Nicolas
Mayett-Moreno, Yésica223, 354
Máynez-Guaderrama, Aurora Irma926
McCabe, Mary Beth 312
Medina Elizondo, Manuel706, 742
Mejía de León, Yolanda 917, 1246
Melchor Cardona, Madeline950
Mendoza Mendoza, Adel 1286
Mendoza Shaw, Fidel Antonio
Mengistu Alemu, Aye
Meraz Ruiz, Lino 1200
Mohammed, Dauda145
Mojica Peñalba, Juan Ernesto
Molina Martínez, Rubén
Molina Morejón, Víctor Manuel 706, 1135, 1165
Monroy Ceseña, Mauro A
Montaño Martínez, Elsa Isabel
Monterde Valenzuela, Ma. de los Angeles 1205
Mora Luján, Elvira
Moral Padilla, Luis
Morales Zamorano, Luis Alberto
Morelos Gómez, José
Moreno Millanes, María Dolores
Muhammad Kassim, Rezian-na
Munive Hernández, Andrés 1030

Muñoz Santiago, Alberto Elias 1336
Musa, Rosidah
Nagel, Harry
Narayanasamy, Cheedradevi 51
Navarro Chávez, José César Lenin
Obiri-Yeboah, Kwabena
Odei-Lartey, Eliezer Ofori
Odunjo, Oluronke Omolola158
Oliva Gómez, Eduardo797
Olivas Valdez, Erika 1089, 1111
Olloqui López, Armandina Margarita 1023
Olvera Carrascosa, Jorge Rafael
Oncioiu, Ionica
Onyina, Paul A403
Opincă, Mihai261
Ortega Ruiz, Josefina 1073
Ortiz Lugo, Astrid Irais 1116
Orue-Carrasco, Fernando
Osa Ouma, Clemencia
Osorio Calderón, Jesús 1397
Padilla Martínez, Albania 565, 593
Paramo, Mariana 1338
Paredes Zempual, Daniel 1062
Parkinson, Alan
Parra Álviz, Mercedes 1101
Parra Uscanga, Minerva 1340
Parra Valenzuela, Juán Antonio667
Paz Prado, Iván 1221
Pedraza Rendón, Oscar Hugo 1221, 1359
Pelayo Velázquez, Marcela de Guadalupe
Peliova, Jana
reliuva, Jalia
David Dahaya Carryán Davía 792
Perea Robayo, Germán Darío782
Perea Robayo, Germán Darío
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Rambo, Charles M.2, 274
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Rambo, Charles M2, 274Ramírez Barón, María Concepción997, 1350, 1418
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Rambo, Charles M2, 274Ramírez Barón, María Concepción997, 1350, 1418Ramírez Flores, María Soledad753, 1212
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Rambo, Charles M2, 274Ramírez Barón, María Concepción997, 1350, 1418
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Brito, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Rambo, Charles M2, 274Ramírez Barón, María Concepción997, 1350, 1418Ramírez Flores, María Soledad753, 1212Ramos Soto, Ana Luz1031
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Brito, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Rambo, Charles M2, 274Ramírez Barón, María Concepción997, 1350, 1418Ramírez Flores, María Soledad753, 1212Ramos Soto, Ana Luz1031Rangel Vázquez, M. A. Lexlie Ireri17
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Rambo, Charles M2, 274Ramírez Barón, María Concepción997, 1350, 1418Ramírez Flores, María Soledad753, 1212Ramos Soto, Ana Luz1031Rangel Vázquez, M. A. Lexlie Ireri17Rengifo Millán, Maritza748
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Ramírez Barón, María Concepción997, 1350, 1418Ramírez Flores, María Soledad753, 1212Ramos Soto, Ana Luz1031Rangel Vázquez, M. A. Lexlie Ireri17Rengifo Millán, Maritza748Reyes Aceves, Fanny Yumayra768
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Brito, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Ramírez Barón, María Concepción997, 1350, 1418Ramírez Flores, María Soledad753, 1212Ramos Soto, Ana Luz1031Rangel Vázquez, M. A. Lexlie Ireri17Rengifo Millán, Maritza748Reyes Aceves, Fanny Yumayra768Reyes Altamirano, Rigoberto976, 1038
Perea Robayo, Germán Darío       782         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Chavira, Seidi Iliana.       855         Pérez Flores, Esteban       1380         Perez Gaxiola, Adrialy       838         Pérez Herrero, María del Henar.       1403         Pérez Herrero, María del Henar.       1403         Pérez Hoyos, Beatriz Elena       1002         Persons, Obeua       154         Plascencia Ávila, Oscar       1165         Priego Huertas, Héctor       593         Putit, Lennora       435         Qiu, Xiaodong       163         Racedo Gutiérrez, Jelibeth Paola       925         Rahman, M. Arifur       289         Ramírez Barón, María Concepción       997, 1350, 1418         Ramírez Flores, María Soledad       753, 1212         Ramos Soto, Ana Luz       1031         Rangel Vázquez, M. A. Lexlie Ireri       17         Reyes Aceves, Fanny Yumayra       768         Reyes Altamirano, Rigoberto       976, 1038         Reyes Pazos, Marcela       1156, 1171
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Ramírez Barón, María Concepción997, 1350, 1418Ramírez Flores, María Soledad753, 1212Ramos Soto, Ana Luz1031Rangel Vázquez, M. A. Lexlie Ireri17Rengifo Millán, Maritza748Reyes Aceves, Fanny Yumayra768Reyes Pazos, Marcela1123
Perea Robayo, Germán Darío       782         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Chavira, Seidi Iliana.       855         Pérez Flores, Esteban       1380         Perez Gaxiola, Adrialy       838         Pérez Herrero, María del Henar.       1403         Pérez Herrero, María del Henar.       1403         Pérez Hoyos, Beatriz Elena       1002         Persons, Obeua       154         Plascencia Ávila, Oscar       1165         Priego Huertas, Héctor       593         Putit, Lennora       435         Qiu, Xiaodong       163         Racedo Gutiérrez, Jelibeth Paola       925         Rahman, M. Arifur       289         Ramírez Barón, María Concepción       997, 1350, 1418         Ramírez Flores, María Soledad       753, 1212         Ramos Soto, Ana Luz       1031         Rangel Vázquez, M. A. Lexlie Ireri       17         Reyes Aceves, Fanny Yumayra       768         Reyes Altamirano, Rigoberto       976, 1038         Reyes Pazos, Marcela       1156, 1171
Perea Robayo, Germán Darío       782         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Chavira, Seidi Iliana.       855         Pérez Flores, Esteban       1380         Perez Gaxiola, Adrialy       838         Pérez Herrero, María del Henar.       1403         Pérez Herrero, María del Henar.       1403         Pérez Hoyos, Beatriz Elena       1002         Persons, Obeua       154         Plascencia Ávila, Oscar       1165         Priego Huertas, Héctor       593         Putit, Lennora       435         Qiu, Xiaodong       163         Racedo Gutiérrez, Jelibeth Paola       925         Rahman, M. Arifur       289         Ramírez Barón, María Concepción       997, 1350, 1418         Ramírez Flores, María Soledad       753, 1212         Ramos Soto, Ana Luz       1031         Rangel Vázquez, M. A. Lexlie Ireri       17         Reyes Aceves, Fanny Yumayra       768         Reyes Altamirano, Rigoberto       976, 1038         Reyes Rodríguez, Mónica Araceli       1123         Reyes Sánchez, Oscar       1171
Perea Robayo, Germán Darío782Pérez Brito, Antonio Emmanuel686, 816Pérez Brito, Antonio Emmanuel686, 816Pérez Chavira, Seidi Iliana855Pérez Flores, Esteban1380Perez Gaxiola, Adrialy838Pérez Herrero, María del Henar1403Pérez Hoyos, Beatriz Elena1002Persons, Obeua154Plascencia Ávila, Oscar1165Priego Huertas, Héctor593Putit, Lennora435Qiu, Xiaodong163Racedo Gutiérrez, Jelibeth Paola925Rahman, M. Arifur289Ramírez Barón, María Concepción997, 1350, 1418Ramírez Flores, María Soledad753, 1212Ramos Soto, Ana Luz1031Rangel Vázquez, M. A. Lexlie Ireri17Reyes Aceves, Fanny Yumayra768Reyes Altamirano, Rigoberto976, 1038Reyes Sánchez, Oscar1171Reyna García, Gabriela706
Perea Robayo, Germán Darío       782         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Chavira, Seidi Iliana.       855         Pérez Flores, Esteban       1380         Perez Gaxiola, Adrialy       838         Pérez Herrero, María del Henar.       1403         Pérez Herrero, María del Henar.       1403         Pérez Hoyos, Beatriz Elena       1002         Persons, Obeua       154         Plascencia Ávila, Oscar       1165         Priego Huertas, Héctor       593         Putit, Lennora       435         Qiu, Xiaodong       163         Racedo Gutiérrez, Jelibeth Paola       925         Rahman, M. Arifur       289         Ramírez Barón, María Concepción       997, 1350, 1418         Ramírez Flores, María Soledad       753, 1212         Ramos Soto, Ana Luz       1031         Rangel Vázquez, M. A. Lexlie Ireri       17         Reyes Aceves, Fanny Yumayra       768         Reyes Altamirano, Rigoberto       976, 1038         Reyes Sánchez, Oscar       1171         Reyna García, Gabriela       706         Robles, Elizabeth       393
Perea Robayo, Germán Darío       782         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Chavira, Seidi Iliana.       855         Pérez Flores, Esteban       1380         Perez Gaxiola, Adrialy       838         Pérez Herrero, María del Henar.       1403         Pérez Herrero, María del Henar.       1403         Pérez Hoyos, Beatriz Elena       1002         Persons, Obeua       154         Plascencia Ávila, Oscar       1165         Priego Huertas, Héctor       593         Putit, Lennora       435         Qiu, Xiaodong       163         Racedo Gutiérrez, Jelibeth Paola       925         Rahman, M. Arifur       289         Ramírez Barón, María Concepción       997, 1350, 1418         Ramírez Flores, María Soledad       753, 1212         Ramos Soto, Ana Luz       1031         Rangel Vázquez, M. A. Lexlie Ireri       17         Reyes Aceves, Fanny Yumayra       768         Reyes Altamirano, Rigoberto       976, 1038         Reyes Sánchez, Oscar       1171         Reyes Sánchez, Oscar       1171         Reyes Sánchez, Oscar       1171         Reyes Sánchez, Osc
Perea Robayo, Germán Darío       782         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Brito, Antonio Emmanuel       686, 816         Pérez Chavira, Seidi Iliana.       855         Pérez Flores, Esteban       1380         Perez Gaxiola, Adrialy       838         Pérez Herrero, María del Henar.       1403         Pérez Herrero, María del Henar.       1403         Pérez Hoyos, Beatriz Elena       1002         Persons, Obeua       154         Plascencia Ávila, Oscar       1165         Priego Huertas, Héctor       593         Putit, Lennora       435         Qiu, Xiaodong       163         Racedo Gutiérrez, Jelibeth Paola       925         Rahman, M. Arifur       289         Ramírez Barón, María Concepción       997, 1350, 1418         Ramírez Flores, María Soledad       753, 1212         Ramos Soto, Ana Luz       1031         Rangel Vázquez, M. A. Lexlie Ireri       17         Reyes Aceves, Fanny Yumayra       768         Reyes Altamirano, Rigoberto       976, 1038         Reyes Sánchez, Oscar       1171         Reyna García, Gabriela       706         Robles, Elizabeth       393

Rodríguez Leyva, Eduardo	667
Rodríguez Villanueva, Baltazar 12	246
Rodríguez, José Carlos	848
Rodríguez-Rojas, Adriana	354
Rojas Vásquez, Claudia 10	073
Romero Castillo, Isela	791
Romero Flores, Edna Araceli 10	046
Romero Magaña, Ignacio Francisco	986
Royo Burbano, Maria 1	
Rubio Andres, Mercedes	
Ruiz Ceseña, Francisco Isaías585,	
Rybak, Tatsiana	
Sadique, M Shibley	
Saha, Anup Kumar	
Salami, Adedoyin	
Salas Martínez, Antonio	
San Juan Vera, Norma Yareli	
Sánchez Romero, Ma. Cristina	
Sánchez Córdoba, Gustavo Alberto	
Sánchez Cuéllar, María Guadalupe 1073, 10	196
Sánchez Enríquez, Sergio	968
Sandoval Robles, Cristyan Ahmed de Guadalupe	647
Senties Santos, María Eugenia	
Ser, Elliot M.	
Shapiro, Steven	200
Shin, Sohyoun	
Sicoli, Graziella	
Sintonen, Sanna	
Sivak, Rudolf	
Smit, Van Aardt	
Soberanes Martínez, Pedro de Jesús	043 004
Solana Vásquez, Omar Raúl	
Solis González, Gabriela Aracelly	504
Soria Ortiz, Diego	
Sosa Sánchez, Elías	
Sotelo Medina, Ana Bolena	
Soto Aguilar, Adriana Patricia	
Stahlin, William 42, 59, 87,	121
Swanson, Andree C	121
Tan, Jin Tarabay, Mohamad	
Tararbay, Mohamad Teed, Dan G	171
Leed. Dan G	
They are Deniini I	173
Thaver, Ranjini L	173 373
Thaver, Ranjini L Tobar Pesántez, Luis	173 373 944
Thaver, Ranjini L Tobar Pesántez, Luis Torres Ramírez, José de Jesús	173 373 944 642
Thaver, Ranjini L Tobar Pesántez, Luis Torres Ramírez, José de Jesús Torres Torre, Mtro. Ramiro	173 373 944 642 955
Thaver, Ranjini L Tobar Pesántez, Luis Torres Ramírez, José de Jesús Torres Torre, Mtro. Ramiro Torres Valdivieso, María Eugenia	173 373 944 642 955 292
Thaver, Ranjini L Tobar Pesántez, Luis Torres Ramírez, José de Jesús Torres Torre, Mtro. Ramiro Torres Valdivieso, María Eugenia	173 373 944 642 955 292 926
Thaver, Ranjini L Tobar Pesántez, Luis Torres Ramírez, José de Jesús Torres Torre, Mtro. Ramiro Torres Valdivieso, María Eugenia	173 373 944 642 955 292 926 403
Thaver, Ranjini L         Tobar Pesántez, Luis         Torres Ramírez, José de Jesús         Torres Torre, Mtro. Ramiro         Torres Valdivieso, María Eugenia         Torres-Arguelles, Vianey         Turnell, Sean         Urciaga García, José	173 373 944 642 955 292 926 403 714
Thaver, Ranjini L         Tobar Pesántez, Luis         Torres Ramírez, José de Jesús         Torres Torre, Mtro. Ramiro         Torres Valdivieso, María Eugenia         Torres-Arguelles, Vianey         Turnell, Sean         Urciaga García, José         Valdez Morales, Adolfo	173 373 944 642 955 292 926 403 714 964
Thaver, Ranjini L         Tobar Pesántez, Luis         Torres Ramírez, José de Jesús         Torres Torre, Mtro. Ramiro         Torres Valdivieso, María Eugenia         Torres-Arguelles, Vianey         Turnell, Sean         Urciaga García, José         Valdez Morales, Adolfo         Valdivia Alcalá, Ramón	173 373 944 642 955 292 926 403 714 964 409
Thaver, Ranjini L         Tobar Pesántez, Luis         Torres Ramírez, José de Jesús         Torres Torre, Mtro. Ramiro         Torres Valdivieso, María Eugenia         Torres-Arguelles, Vianey         Turnell, Sean         Urciaga García, José         Valdez Morales, Adolfo         Valdivia Alcalá, Ramón         1         Valenciana Moreno, Plácido	173 373 944 642 955 292 926 403 714 964 409 730
Thaver, Ranjini LTobar Pesántez, LuisTorres Ramírez, José de JesúsTorres Torre, Mtro. RamiroTorres Valdivieso, María EugeniaTorres-Arguelles, VianeyTurnell, SeanUrciaga García, JoséValdez Morales, AdolfoValdivia Alcalá, RamónValenciana Moreno, PlácidoValenzuela Alcaraz, Víctor Manuel	173 373 944 642 955 292 926 403 714 964 409 730 667
Thaver, Ranjini LTobar Pesántez, LuisTorres Ramírez, José de JesúsTorres Torre, Mtro. RamiroTorres Valdivieso, María EugeniaTorres-Arguelles, VianeyTurnell, SeanUrciaga García, JoséValdez Morales, AdolfoValdivia Alcalá, RamónValenciana Moreno, PlácidoValenzuela Alcaraz, Víctor ManuelValenzuela Reynaga, Rodolfo	173 373 944 642 955 292 926 403 714 964 409 730 667 062
Thaver, Ranjini L         Tobar Pesántez, Luis         Torres Ramírez, José de Jesús         Torres Torre, Mtro. Ramiro         Torres Valdivieso, María Eugenia         Torres-Arguelles, Vianey         Turnell, Sean         Urciaga García, José         Valdez Morales, Adolfo         Valdivia Alcalá, Ramón         Valenciana Moreno, Plácido         Valenzuela Reynaga, Rodolfo         Valenzuela, Leslier	173 373 944 642 955 292 926 403 714 964 964 964 730 667 062 532
Thaver, Ranjini L         Tobar Pesántez, Luis         Torres Ramírez, José de Jesús         Torres Torre, Mtro. Ramiro         Torres Valdivieso, María Eugenia         Torres-Arguelles, Vianey         Turnell, Sean         Urciaga García, José         Valdez Morales, Adolfo         Valdivia Alcalá, Ramón         Valenciana Moreno, Plácido         Valenzuela Reynaga, Rodolfo         Valenzuela, Leslier         Vargas Acosta, Alejandro	173 373 944 642 955 292 926 403 714 964 409 730 667 062 532 380
Thaver, Ranjini L         Tobar Pesántez, Luis         Torres Ramírez, José de Jesús         Torres Torre, Mtro. Ramiro         Torres Valdivieso, María Eugenia         Torres-Arguelles, Vianey         Turnell, Sean         Urciaga García, José         Valdez Morales, Adolfo         Valdivia Alcalá, Ramón         Valenciana Moreno, Plácido         Valenzuela Alcaraz, Víctor Manuel         Valenzuela, Leslier         Vargas Acosta, Alejandro         Tásquez Arana, Leopoldo	173 373 944 642 955 292 926 403 714 964 409 730 667 730 667 062 532 380 277
Thaver, Ranjini LTobar Pesántez, LuisTorres Ramírez, José de JesúsTorres Torre, Mtro. RamiroTorres Valdivieso, María EugeniaTorres-Arguelles, VianeyTurnell, SeanUrciaga García, JoséValdez Morales, AdolfoValdivia Alcalá, RamónValenciana Moreno, PlácidoValenzuela Alcaraz, Víctor ManuelValenzuela, LeslierVargas Acosta, Alejandro1Vásquez Arana, Leopoldo1Vásquez Mireles, Rosalva D	173 373 944 642 955 292 926 403 714 964 409 730 667 062 532 380

Vega López, Alfonso
Velasco Aulcy, Lizzette
Velázquez Valadez, Jesús
Velázquez-Sánchez, Rosa María 1180
Vera Muñoz, Gerardo Serafín 1188
Vera Muñoz, José Gerardo Serafín
Vera Muñoz, María Antonieta Monserrat 321, 1188
Vergara Schmalbach, Juan Carlos
Veyna Roacho, Jesús Aurelio 1171
Villa Pérez, Lucila621
Villegas, Francisco
Visbal Cadavid, Delimiro Alberto 925, 1002, 1030
Vizcarra Vizcarra, Norma Leticia 1256
Wali, Md. Faisal Ibne
Wali, Muhammad Maruf Ibne
Wang, Hsien-Bin
Weaver, Richard

Webber, Jon K	
Wei, Shih-Yung	
Willett, Keith	253
Winkelmolen, Ralph	
Woolfolk Gallego, Laura Elena	
Xu, Zhonghua (Betty)	
Yaacoub, Chadi	
Yarmish, Gavriel	
Yuan, Jia	
Zapata Valencia, Juan Carlos	
Zaragoza Joya, Luis Antonio	
Zárraga Cano, Lucila	504
Zazueta Villavicencio, Blanca Esthela	
Zhang, Mo	478
Zhang, Ran	
Zhou, Jie	300
Zhu, Jigao	
ZUO, Ling Yan	300

#### Universities and Institutions Represented

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